



Township Archives
Township of Brick, NJ
401 Chambers Bridge Rd, Brick, NJ 08723

***This File Contains Personal Identifiable
Information of Private Citizen(s).***

Certain information contained in this file is ***Exempt from Release*** under the Open Public Records Act (OPRA) (Public Law 2001, CHAPTER 404 (N.J.S.A. 47:1A-1 et seq.)) and Executive Orders issued by the Governor of New Jersey. The following information ***MUST*** be redacted prior to release:

- Social Security Numbers
- Drivers' License Numbers
- Unlisted Phone Numbers
- Credit Card Numbers
- Bank Account Numbers and Balances

For further information, consult with the Township Clerk, Township Archivist or Township Attorney prior to release.

A handwritten signature in black ink, appearing to read "Bryan J. Dickerson", is written over a horizontal line.

Bryan J. Dickerson, CA, CMR
Township Archivist

BLOCK 670 LOT 4 QUALIFICATION CODE _____ ADDRESS (SITE) _____ PERMIT NO. 18-3401



CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: 2770 Hooper Ave. & Brick Blvd Brick NJ.

2. Name of Owner in Fee: ARZOTTA Kennedy Mall

Tel. 732 237 4342 e-mail DRCHANDALON@OUTLOOK

Address 15 FELLA ST. Howell NJ 07731

3. Ownership in Fee: Public ☒ Private ☐

4. Principal Contractor: TBD Tel. C.O.C.

Address _____ e-mail _____

License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____

Home Improvement Contractor Registration No. or Exemption Reason _____

Federal Emp. ID No. _____ FAX: _____

5. Architect or Engineer TRICARICO Contact Joe VENA

Address 502 VALLEY RD. WAYNE NJ. e-mail JOSEPH@TRICARICO

Tel. 973-692-0222 FAX: 973-692-0223 COM

6. Responsible Person in Charge once Work has Begun

Tel. _____ FAX: _____

V. FEE SUMMARY (for office use only)

	Update	Update
1. Building	\$ 2508	
2. Electrical	490	150
3. Plumbing	597	100
4. Fire Protection	110	250
5. Elevator Devices		
6. Subtotal		
7. Less 20% for State Plan Review \$		
8. Subtotal	\$	
9. State Permit Surcharge Fee	182	10
10. Subtotal	2	
11. Cert. of Occupancy	150	
12. Other		
13. TOTAL	\$ 3858	270

VI. BUILDING/SITE CHARACTERISTICS

(office use only)

1. Number of Stories _____

2. Height of Structure _____ ft.

3. Area — Largest Floor _____ sq. ft.

4. New Building Area _____ sq. ft.

5. Volume of New Structure _____ cu. ft.

6. Max. Live Load _____

7. Max. Occupancy Load 18

8. If Industrialized Building: State Approved _____ HUD _____

9. Total Land Area Disturbed _____ sq. ft.

10. Flood Hazard Zone _____

11. Base Flood Elevation _____

12. Wetlands yes _____ no _____

IIa. PROPOSED WORK

- ☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition
- ☐ Repair ☐ Alteration ☒ Renovation ☐ Reconstruction
- ☐ Asbestos Abat. Subn. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES

(Check all that apply)

- ☒ Building
- ☒ Electrical
- ☒ Plumbing
- ☒ Fire Protection
- ☐ Elevator

FOR OFFICE USE ONLY (Optional)

Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates	Rejection	Re-viewer
	AP			12/1/18	SE			
	8/10/18			11/5/18	PS			
	8/27/18			11/6/18	PS			
				12/2/18	PS			
	Eng			9/2/18	EC			

TOTAL COST \$0

III. PLAN REVIEW (optional)

DO YOU WANT:

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/
2. ☐ Dumbwaiters/Moving Walks
3. ☐ High Pressure Boilers
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Pressure Vessels
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks
10. ☐ Swimming Pools, Spas and Hot Tubs
11. ☐ LPG Gas Tanks
12. ☐ Fire Alarm

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: Select Group _____
3. Change in Use Group, Indicate Present: Select Group _____
4. No. of dwelling units: Total Units Income-restricted
- Gained, Sale _____
- Gained, Rental _____
- Lost, Sale _____
- Lost, Rental _____

B. NON-RESIDENTIAL (primary use)

1. State Specific Use: Hair Salon
2. Use Group, Proposed: Select Group B
3. Change in Use Group, Indicate Present: Select Group _____
- C. MIXED USE -List secondary use(s): _____
- D. Construct. Classification: Present _____ Proposed _____

Rolled Plans

Fantastic Jams

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(f)1.ix:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☐ Check if contractor.

Agent Name Bita Arlotta
Address 15 Fella St.
Howell NJ 07731
Telephone (732) 237-4342
Signature Bita Arlotta

III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

BLOCK _____ LOT _____ QUALIFICATION CODE _____ ADDRESS (SITE) _____ PERMIT NO. _____



CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: _____

2. Name of Owner in Fee: _____

Tel. (_____) _____ e-mail _____

Address _____

3. Ownership in Fee: Public _____ Private _____

4. Principal Contractor: _____ Tel. (_____) _____

Address _____ e-mail _____

License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. _____ FAX: (_____) _____

5. Architect or Engineer _____ Contact _____

Address _____ e-mail _____

Tel. (_____) _____ FAX: (_____) _____

6. Responsible Person in Charge once Work has Begun _____

Tel. (_____) _____ FAX: (_____) _____

V. FEE SUMMARY (for office use only)

	Update	Update
1. Building	\$ _____	_____
2. Electrical	_____	_____
3. Plumbing	_____	_____
4. Fire Protection	_____	_____
5. Elevator Devices	_____	_____
6. Subtotal	_____	_____
7. Less 20% for State Plan Review	\$ _____	_____
8. Subtotal	\$ _____	_____
9. State Permit Surcharge Fee	_____	_____
10. Subtotal	\$ _____	_____
11. Cert. of Occupancy	_____	_____
12. Other	_____	_____
13. TOTAL	\$ _____	_____

VI. BUILDING/SITE CHARACTERISTICS

1. Number of Stories	_____	_____
2. Height of Structure	_____ ft.	_____
3. Area — Largest Floor	_____ sq. ft.	_____
4. New Building Area	_____ sq. ft.	_____
5. Volume of New Structure	_____ cu. ft.	_____
6. Max. Live Load	_____	_____
7. Max. Occupancy Load	_____	_____
8. If Industrialized Building: State Approved	_____ HUD	_____
9. Total Land Area Disturbed	_____ sq. ft.	_____
10. Flood Hazard Zone	_____	_____
11. Base Flood Elevation	_____ ft.	_____
12. Wetlands	yes _____ no _____	_____

(office use only)

IIa. PROPOSED WORK

☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition

☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction

☐ Asbestos Abat. -Subch. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES
(Check all that apply)

	Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates	Re-viewer
							Approval	Rejection
☐ Building								
☐ Electrical								
☐ Plumbing								
☐ Fire Protection								
☐ Elevator								
TOTAL COST								

FOR OFFICE USE ONLY (Optional)

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use: _____

2. Use Group, Proposed: _____

3. Change in Use Group, Indicate Present: _____

4. No. of dwelling units: Total Units Income-restricted

Gained, Sale	_____
Gained, Rental	_____
Lost, Sale	_____
Lost, Rental	_____

B. NON-RESIDENTIAL (primary use)

1. State Specific Use: _____

2. Use Group, Proposed: _____

3. Change in Use Group, Indicate Present: _____

C. MIXED USE -List secondary use(s): _____

D. Construct. Classification: Present _____ Proposed _____

III. PLAN REVIEW (optional)

DO YOU WANT:

1. ☐ Partial Releases

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/Dumbwaiters/Moving Walks	4. ☐ Refrigeration Systems	8. ☐ Smoke Control Systems in Open Wells	12. ☐ Fire Alarm
2. ☐ High Pressure Boilers	5. ☐ Cross-Connections/Backflow Preventers	9. ☐ Underground Storage Tanks	
3. ☐ Hazardous Uses/Places of Assembly	6. ☐ Swimming Pools, Spas and Hot Tubs	10. ☐ Swimming Pools, Spas and Hot Tubs	

OFFICE USE ONLY

[illegible]

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☒ Zoning Officer	<i>SC</i>	<i>9/6/18</i>							<i>21A-18-01062</i>
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)			
Name of Code & Edition		Name of Code & Edition	
Building _____	Energy _____	Other _____	
Electrical _____	Barrier Free _____	_____	
Plumbing _____	Flood Hazard _____	_____	
Fire Protection _____	As Built Elevation Cert. _____	_____	
Mechanical _____	Other _____	_____	

X. CERTIFICATES ISSUED (office use only)		DATE ISSUED	DATE EXPIRED	DATE REISSUED	DATE EXPIRED
☐ Temporary Certificate of Occupancy	No. _____	_____	_____	_____	_____
☐ Temporary Certificate of Compliance	No. _____	_____	_____	_____	_____
☐ Continued Certificate of Occupancy	No. _____	_____	_____	_____	_____
☐ Certificate of Compliance	No. _____	_____	_____	_____	_____
☐ Certificate of Occupancy	No. _____	_____	_____	_____	_____
☐ Certificate of Approval	No. _____	_____	_____	_____	_____
☐ Lead Abatement Clearance Certificate	No. _____	_____	_____	_____	_____

BLOCK 670 LOT 4 QUALIFICATION CODE _____ ADDRESS (SITE) 2770 Hooper Ave PERMIT NO. _____



CONSTRUCTION PERMIT APPLICATION

Applicant Completes: Sections I, II, III (optional), IV, VI, and VII

I. IDENTIFICATION

1. Proposed Work Site at: 2770 Hooper Ave
2. Name of Owner in Fee: Kennedy Mall Associates
Tel. () e-mail
Address 641 Shunpike Rd Chatham 07928
street municipality zip code
3. Ownership in Fee: Public ☒ Private ☐
4. Principal Contractor: Korbury Energy Group Tel. (732) 202-6908
Address 2715 Hooper Ave STE 2B e-mail kelly@alt-ee.com
BRICK NJ 08723
License No. OR, if new home, Builder Reg. No. _____ Exp. Date _____
Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____
Federal Emp. ID No. 83-1590359 FAX: (732) 451-2523
5. Architect or Engineer _____ Contact _____
Address _____ e-mail _____
Tel. () FAX: ()
6. Responsible Person in Charge once Work has Begun Kelly Kaari
Tel. (732) 202-6908 FAX: (732) 451-2523

V. FEE SUMMARY (for office use only)

	Update	Update
1. Building	\$	
2. Electrical		
3. Plumbing		
4. Fire Protection		
5. Elevator Devices		
6. Subtotal		
7. Less 20% for State Plan Review	\$	
8. Subtotal	\$	
9. State Permit Surcharge Fee		
10. Subtotal	\$	
11. Cert. of Occupancy		
12. Other		
13. TOTAL	\$	

VI. BUILDING/SITE CHARACTERISTICS

	(office use only)
1. Number of Stories	
2. Height of Structure	ft.
3. Area — Largest Floor	sq. ft.
4. New Building Area	sq. ft.
5. Volume of New Structure	cu. ft.
6. Max. Live Load	
7. Max. Occupancy Load	
8. If Industrialized Building: State Approved _____ HUD _____	
9. Total Land Area Disturbed	sq. ft.
10. Flood Hazard Zone	
11. Base Flood Elevation	ft.
12. Wetlands yes _____ no _____	

IIa. PROPOSED WORK

- ☐ Minor Work ☐ New Building ☐ Addition ☐ Demolition
☐ Repair ☐ Alteration ☐ Renovation ☐ Reconstruction
☐ Asbestos Abat. -Subch. 8 ☐ Lead Hazard Abatement ☐ Radon Remediation ☐ Annual Permit

IIb. SUBCODES

(Check all that apply)

- ☐ Building
☐ Electrical
☐ Plumbing
☐ Fire Protection
☐ Elevator

FOR OFFICE USE ONLY (Optional)

Est. Cost	Plans Rec'd by	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Rejection	Re-viewer
	<u>NR</u>	<u>11/8/18</u>						

TOTAL COST

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____
4. No. of dwelling units: Total Units Income-restricted
Gained, Sale _____
Gained, Rental _____
Lost, Sale _____
Lost, Rental _____

B. NON-RESIDENTIAL (primary use)

1. State Specific Use: _____
2. Use Group, Proposed: _____
3. Change in Use Group, Indicate Present: _____

C. MIXED USE -List secondary use(s): _____

- D. Construct. Classification: Present _____
Proposed _____

III. PLAN REVIEW (optional)

DO YOU WANT:

1. ☐ Partial Releases
2. ☐ Prototype Processing

IV. DOES OR WILL YOUR BUILDING CONTAIN ANY OF THE FOLLOWING?

1. ☐ Elevators/Escalators/Lifts/
Dumbwaiters/Moving Walks
2. ☐ High Pressure Boilers
3. ☐ Pressure Vessels
4. ☐ Refrigeration Systems
5. ☐ Cross-Connections/Backflow Preventers
6. ☐ Hazardous Uses/Places of Assembly
7. ☐ Sprinklers/Standpipes
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks
10. ☐ Swimming Pools, Spas and Hot Tubs
11. ☐ LPG Gas Tanks
12. ☐ Fire Alarm

Fantastic Sams

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION (to be completed if the applicant is the owner in fee)

I hereby certify that I am the owner in fee of the property listed on Page 1.

Mark the following applicable boxes:

- A. ☐ I further certify that a new home (private residence) will be constructed on this property for my own use and occupancy. This dwelling is to be occupied by myself and is not to be used for any purpose other than single family residential use. I attest that all construction, plumbing, or electrical work will be done, in whole or in part, by me or by subcontractors under my supervision, in accordance with all applicable laws; and, I further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.S.A. 46:3B-1 et seq.) and that such fact shall be disclosed to any person purchasing this property within ten years of the date of issuance of a certificate of occupancy.

I UNDERSTAND THAT IN MARKING BOX A, I ACKNOWLEDGE THAT I AM ASSUMING RESPONSIBILITY FOR THE WORK DONE ON SAID PROPERTY, THE CONDITION OF THE PROPERTY PRIOR TO, DURING, AND AFTER ANY WORK PERFORMED, AND FOR THE PERFORMANCE OF THE SUBCONTRACTORS I HIRE, EMPLOY, OR OTHERWISE CONTRACT OR WITH WHOM I MAKE AGREEMENTS TO PERFORM WORK. I AM VOLUNTARILY AND KNOWINGLY ASSUMING THIS RESPONSIBILITY.

- B. ☐ I further certify the following as required by the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(f)1.ix:

I personally prepared the plans submitted for: 1) the new home referred to in A.; or, 2) an addition, alteration, renovation, or repair to an existing single family residence owned and occupied by myself and located on the property listed on Page 1; or, 3) a new structure that will be physically separate from, but that will be deemed part of, an existing single family residence that is owned and occupied by myself and located on the property listed on Page 1.

- C. ☐ I further certify that I will perform or supervise the following work:

C.1. ☐ Building C.2. ☐ Fire Protection

I further certify that I will perform the following work:

C.3. ☐ Electrical C.4. ☐ Plumbing

- D. ☐ I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I understand that if any of the above statements are willfully false, I am subject to punishment.

Signature _____ Date _____

II. AGENT SECTION (to be completed if the applicant is not the owner in fee)

I hereby certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(d): the proposed work is authorized by the owner in fee; and I have been authorized by the owner in fee to make this application as his agent.

I further certify the following as required by the Uniform Construction Code, N.J.A.C. 5:23-2.15(a)5: All required State, county, and local prior approvals have been given, including such certification as the construction official may require.

I agree to advise all contractors on this project that they are required to be registered with the New Jersey Division of Taxation and to comply with all New Jersey tax laws.

I understand that if any of the above statements are willfully false, I am subject to punishment.

☒ Check if contractor.

Agent Name Roxbury Energy Group LLC

Address 2715 Hooper Ave Ste 2B

Brick NJ 08723

Telephone (732) 202-6908

Signature Kelly Kaan

III. ☐ LEAD HAZARD ABATEMENT: Include Homeowner or Building Owner Affidavit as per N.J.A.C. 5:17.

OFFICE DATE RECEIVED: _____

VIII. PRIOR APPROVALS CHECKLIST (office use only)	LOCAL APPROVAL		COUNTY APPROVAL		REGIONAL APPROVAL		STATE APPROVAL		COMMENTS
	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	Prelimin. Initial	Final Date	
☐ Zoning Officer									
☐ Planning Board									
☐ Zoning Board									
☐ Sewer Authority									
☐ Water Authority									
☐ Police Department									
☐ Health Department									
☐ Soil Conservation									
☐ N.J. Department of Community Affairs									
☐ N.J. Department of Transportation									
☐ N.J. Department of Environmental Protection									
☐ Utility Dig No.									
☐									
☐									

IX. SUBCODES AND SPECIAL REGULATIONS APPLICABLE (office use only—optional)

Name of Code & Edition		Name of Code & Edition		Other
Building	_____	Energy	_____	_____
Electrical	_____	Barrier Free	_____	_____
Plumbing	_____	Flood Hazard	_____	_____
Fire Protection	_____	As Built Elevation Cert.	_____	_____
Mechanical	_____	Other	_____	_____

X. CERTIFICATES ISSUED (office use only)		DATE ISSUED	DATE EXPIRED	DATE REISSUED	DATE EXPIRED
☐ Temporary Certificate of Occupancy	No. _____	_____	_____	_____	_____
☐ Temporary Certificate of Compliance	No. _____	_____	_____	_____	_____
☐ Continued Certificate of Occupancy	No. _____	_____	_____	_____	_____
☐ Certificate of Compliance	No. _____	_____	_____	_____	_____
☐ Certificate of Occupancy	No. _____	_____	_____	_____	_____
☐ Certificate of Approval	No. _____	_____	_____	_____	_____
☐ Lead Abatement Clearance Certificate	No. _____	_____	_____	_____	_____

OFFICE USE ONLY

[illegible]

RECEIVING CLERK _____
DATE REC'D _____

ZONING PERMIT APPLICATION

PERMIT # ZP-18-01409
DATE ISSUED 12/13/18

BLOCK: 670 LOT: 4 QUALIFIER: — SITE ADDRESS: 2770 Hooper Ave

IDENTIFICATION:

1. NAME OF OWNER IN FEE: Kennedy mall Associates
COMPLETE ADDRESS: 641 Shunpike Rd.
Chatham, NJ 07928
PHONE # (973) 966-2800 EMAIL: DVoight@FideLityLand.com
2. NAME OF APPLICANT: Rita Arlotta
APPLICANT ADDRESS: 15 FELLA ST
Howell NJ 07731
PHONE # (732) 237-4342 EMAIL: DRCMAirSalon@outlook.com
3. RESPONSIBLE PERSON FOR WORK: Rita Arlotta
PHONE # (232) 237-4342 FAX# _____
4. SIGNATURE OF APPLICANT: X Rita Arlotta

FOR OFFICE USE ONLY

FEE SUMMARY:

APPLICATION FEE: \$ 75-
OTHER: \$ _____
TOTAL: \$ 75-

REQUIRED BY APPLICANT

RESIDENTIAL: _____
COMMERCIAL: ☒ _____
EXISTING USE: Brick Fitness
PROPOSED USE: Funkitons Salon

BOARD APPROVAL: _____ PB _____ ZB _____
RESOLUTION#: _____
APPROVAL DATE: _____

PROJECT DESCRIPTION: (PLEASE CHECK APPLICABLE WORK & DESCRIBE)

*NEW BUILDING: _____ *ADDITION _____ *ALTERATION _____ *PORCH _____ *DECK _____

POOL: ABOVE GROUND _____ IN GROUND _____ FENCE: HEIGHT _____ TYPE _____ MATERIAL _____

HEIGHT: _____ (*IF APPLICABLE)

OTHER _____

DESCRIPTION: Tent Fit up

ZONING REVIEW:

DATE REVIEWED: 9-6-18 DATE DENIED: _____ DATE APPROVED: 9-6-18 INTLS: cu

(SEE BACK PAGE)

TOWNSHIP OF BRICK ZONING CHECKLIST

1) Four (4) copies of plot plan containing:

- All existing and proposed structures
- All dimensions of the lot and structures
- All setbacks from the structures to the property lines
- All adjacent streets and waterways
- If applicable, include a copy of the Zoning Board of Adjustment Resolution, the date that the map was signed, and/or the date that the subdivision map was filed with the Ocean County Clerk, along with the file map and number.

2) Two copies of the plans with dimensions and heights noted:

- Floor plans and elevations
- Signed site plans
- Property map
- Survey map

Choose which is applicable for submission

3) Plot plans and building plans must match for complete review

NOTE: NO PARTIAL, TAPED, FAXED, REDUCED OR ENLARGED COPIES CAN BE ACCEPTED

OFFICE USE ONLY

ZONING REVIEW:

DATE REVIEWED: 9/6/18 DATE DENIED: _____ DATE APPROVED: 9/6/18 INTLS: scw

[illegible]

LAND USE

245 Attachment 5

Township of Brick

SCHEDULE OF AREA, YARD AND BUILDING REQUIREMENTS

Ocean County, New Jersey

[Amended 6-26-1979 by Ord. No. 354-2B-79; 4-22-1980 by Ord. No. 354-2H-80; 10-14-1980 by Ord. No. 354-ZN-80; 9-23-1980 by Ord. No. 354-1B-80; 8-25-83 by Ord. No. 354-2SS-83; 11-5-1984 by Ord. No. 354-2-AA-84; 11-5-1984 by Ord. No. 354-2CCC-84; 6-24-1986 by Ord. No. 354-2WWW-86; 9-13-1988 by Ord. No. 354-2TTT-88; 9-27-1988 by Ord. No. 354-2XXX-88; 9-12-2000 by Ord. No. 354-2EE-00; 5-9-2000 by Ord. No. 354-2Z-00; 3-26-2002 by Ord. No. 354-2C-02; 11-26-2002 by Ord. No. 354-2L-02; 3-25-2003 by Ord. No. 354-2D-03; 6-13-2006 by Ord. No. 19-06]

Zone	Minimum Lot Size										Minimum Required Yard Depth									
	Interior Lots					Principal Building					Accessory Building					Maximum Building Height				
	Area (square feet)	Width (feet)	Depth (feet)	Area (square feet)	Width (feet)	Depth (feet)	Front Yard (feet)	Side Yard, Back, Each (feet)	Sides Combined (feet)	Rear Yard (feet)	Side Yard (feet)	Rear Yard (feet)	Building Coverage	Stories	Basement (feet)	Ridge (feet)	Minimum Floor/2 stories/1 story	Maximum Allowable Coverage		
R-R	40,000	150	150	40,000	150	150	50	25		25	25	25	25%	—	25		—			
R-R-2																				
R-R-3																				
R-20	20,000	100	125	25,000	100	125	40	15		—	10	10	25%	—	25	35	38.5	—		
R-15	15,000	100	115	17,250	100	115	35	12		—	10	10	25%	—	25	35	38.5	—		
R-10	10,000	90	100	10,500	100	100	30	6		—	5	5	30%	—	25	35	38.5	—		
R-7.5	7,500	75	90	9,000	75	90	25	6		—	5	5	30%	—	25	35	38.5	—		
R-5	5,000	50	75	6,000	50	75	20	5		—	5	5	35%	—	25	35	38.5	—		
O-P	15,000	100	150	15,000	100	150	10	10		—	50	20	35%	—	—	35	38.5	—		
B-1	10,000	100	90	12,500	100	125	30	10		—	20	10	30%	2	—	35	38.5	1,500	70%	
B-2	20,000	125	125	20,000	125	125	50	10		—	50	20	30%	2	—	35	38.5	1,000	60%	
B-3	2 acres	200	200	2 acres	200	200	75	30		—	50	20	25%	—	—	35	38.5	2,000	65%	
B-4	5 acres	300	300	—	—	—	100	50(150')		—	50	20	25%	3	—	35	38.5	30,000	70%	
M-1	5 acres	300	300	5 acres	300	300	100	50		—	150	75	30%	—	—	35	38.5	5,000	65%	
R-M	25 acres	350	350	—	—	—	50	50		—	30	30	20%	2	25	35	38.5	2,000	50%	
O-P-1	40,000	150	150	40,000	150	150	50	20		—	50	20	25%	—	—	—	—		70%	
H-S																				

NOTES:

1. If adjacent to residential zone or use.
2. The maximum lot coverage shall refer only to that percentage of an affected lot which is suitable for building.
3. For rear yard setback requirements for accessory buildings on waterfront property, see § 245-10D.

FOR REFERENCE ONLY

Attachment 5:1

ENGINEERING PERMIT APPLICATION

BLOCK: 670

LOT: 4

ADDRESS: _____

RECEIVING CLERK: _____

PERMIT #: _____

IDENTIFICATION:

1. WORK SITE ADDRESS: 2720 Hooper AVE.
2. NAME OF OWNER IN FEE: Kennedy MALL ASSOCIATES
ADDRESS: 641 Shunpike RD PHONE #: (973) 966-2800
Chatham NJ 07928 FAX #: (973) 966-6161
3. PRINCIPAL CONTRACTOR: _____
ADDRESS: _____ PHONE #: () _____
FAX #: () _____
4. ARCHITECT OR ENGINEER: Tricarico
ADDRESS: 502 Valley RD Way PHONE: # (973) 692-0222
N.J.
5. RESPONSIBLE PERSON FOR WORK: _____
ADDRESS: _____
PHONE #: () _____ FAX #: () _____ E-MAIL: _____

PROJECT DESCRIPTION: ☐ GRADING/CLEARING ☐ ROAD OPENING
☐ SOIL REMOVAL/FILL ☐ RETAINING WALL ☐ POOL
☐ BULKHEAD/DOCK ☐ DWELLING ☐ TREE REMOVAL

☒ OTHER Tenant Fitup

LENGTH: _____ WIDTH: _____ HEIGHT: _____

FEE SUMMARY:

APPLICATION FEE: \$ _____
REVIEW FEE: \$ _____
INSPECTION FEE: \$ _____
OTHER: \$ _____
BOND(S): \$ _____
TOTAL: \$ _____

SPECIAL CONDITIONS:

OCEAN COUNTY SOILS: _____
DRAINAGE EASEMENTS: _____
UTILITY EASEMENTS: _____
CONSERVATION EASEMENTS: _____
FEMA REQUIREMENTS: _____
D.E.P. PERMITS: _____
BOARD APPROVAL: ☐ PB ☐ ZB

APPLICATION NUMBER: _____

APPROVED DATE: _____

ENGINEERING REVIEW:

DATE RECEIVED: _____ DATE REJECTED: _____ DATE APPROVED: _____ INITIALS: _____



PLUMBING SUBCODE TECHNICAL SECTION



Date Received
Control #

12/13/18

Date Issued
Permit #

18-3401

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 670 Lot 4 Qualification Code _____

Work Site Location Fantastic Sam's - 2770 Hooper Ave

Owner in Fee: Kennedy Mall Associates

Tel. _____ e-mail _____

Address 641 Shunpike Rd Chatham NJ 07928

Contractor: ClearStream Mechanical, LLC municipality _____ Tel. (732) 267-5527 zip code _____

Address 1043 Edgebrook Dr. E e-mail _____

Toms River, NJ 08757

Contractor License No. BIO11794 Exp. Date 06/30/2019

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): _____

Federal Emp. ID No. 201162952 FAX: _____

B. PLUMBING CHARACTERISTICS

Use Group Present _____ Proposed _____

Building Sewer Size _____ Public Sewer _____ Private Septic _____

Water Service Size _____ Public Water _____ Private Well _____

Est. Cost of Plumbing Work \$ 14,000.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW

- [] No Plans Required
[] Partial - Underslab Utilities Approved

Date: _____ Approved by: _____

- [] Plumbing Plans Approved

Date: _____ Approved by: _____

Joint Plan Review Required:

- [] Bldg. [] Elec. [] Fire. [] Elev.

SUBCODE APPROVAL for PERMIT

Date: 12-16-18

Approved by: [Signature]

SUBCODE APPROVAL for CERTIFICATE

- [] CO [] CCO [] CA

Date: _____

Approved by: _____

INSPECTIONS

Type:

Slab

Rough

Water

Sewer

Fixtures

Gas Equipment

Gas Piping

LPGas Tank

Fuel Oil Piping

Solar

T.C.O.

Final

Dates (Month/Day)
Failure Failure Approval Initial

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant sign/Contractor
sign and seal here:

Print name here: Douglas Parave

[X] Licensed Plumbing Contractor [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

TENNANT Fitout
F/I RESTROOM, SINK, WASHES

QTY.

FIXTURE/EQUIPMENT

1

Water Closet

Urinal/Bidet

Bath Tub

1

Lavatory

Shower

Floor Drain

4

Sink

Dishwasher

Drinking Fountain

1

Washing Machine STACKABLE

Hose Bibb

1

Water Heater

Fuel Oil Piping

Gas Piping

LPGas Tank

Steam Boiler

Hot Water Boiler

Sewer Pump

Interceptor/Separator

Backflow Preventer

Greasetrap

Sewer Connection

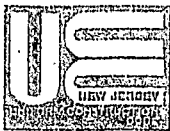
Water Service Connection EXISTING

Stacks

Other

FEE (Office Use Only)

\$ _____



PLUMBING SUBCODE TECHNICAL SECTION



Date Received
Control #

12/13/18

Date Issued
Permit #

18-3401+B

A. IDENTIFICATION—APPLICANT: COMPLETE ALL APPLICABLE INFORMATION. WHEN CHANGING CONTRACTORS, NOTIFY THIS OFFICE. CALL UTILITY DIG NO: 1-800-272-1000.

Block 670 Lot 4 Qualification Code _____

Work Site Location Fantastic Sams

8770 Hooper Ave

Owner in Fee: Kennedy Mall Associates

Tel. (____) e-mail _____

Address 641 Shunpike Rd, Chatham, NJ 07928

Contractor: Michael Coleman HVAC Tel. (732) 768-3056

Address 301 Monmouth Rd, Freehold e-mail Michael.Coleman.Hvac@Yahoo.Com

Contractor License No. 19AC 00127900 Exp. Date 6/30/18

Home Improvement Contractor Registration No. or Exemption Reason (if applicable): 13VH05942600

Federal Emp. ID No. _____ FAX: (____) _____

B. PLUMBING CHARACTERISTICS

Use Group Present _____ Proposed _____

Building Sewer Size _____ Public Sewer _____ Private Septic _____

Water Service Size _____ Public Water _____ Private Well _____

Est. Cost of Plumbing Work \$ 15000.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW

[] No Plans Required

[] Partial -Understab Utilities Approved

Date: _____ Approved by: _____

[] Plumbing Plans Approved

Date: _____ Approved by: _____

Joint Plan Review Required:

[] Bldg. [] Elec. [] Fire. [] Elev.

SUBCODE APPROVAL for PERMIT

Date: 12-16-18

Approved by: _____

SUBCODE APPROVAL for CERTIFICATE

[] CO [] CCO [] CA

Date: _____

Approved by: _____

C. CERTIFICATION IN LIEU OF OATH

I hereby certify that I am the (agent of) owner of record and am authorized to make this application and perform the work listed on this application.

Applicant sign/Contractor
sign and seal here:

Print name here:

Michael Coleman HVAC

[] Licensed Plumbing Contractor [] Exempt Applicant

D. TECHNICAL SITE DATA

DESCRIPTION OF WORK

Installing HVAC Split system

QTY.

FIXTURE/EQUIPMENT

Water Closet

Urinal/Bidet

Bath Tub

Lavatory

Shower

Floor Drain

Sink

Dishwasher

Drinking Fountain

Washing Machine

Hose Bibb

Water Heater

Fuel Oil Piping

Gas Piping

LPGas Tank

Steam Boiler

Hot Water Boiler

Sewer Pump

Interceptor/Separator

Backflow Preventer

Greasetrap

Sewer Connection

Water Service Connection

Stacks

Other HVAC

FEE (Office Use Only)

\$ _____

Administrative Surcharge \$ _____
Minimum Fee \$ _____
State Permit Surcharge Fee \$ _____
TOTAL FEE \$ _____



PERMIT UPDATE

Date Update Issued 12/12/18
Control # C-18-003272+B
Permit # +B
18-5401

IDENTIFICATION Block: 670 Lot: 4 Qualifier _____
Work Site Location: 2770 HOOPER AVE. Brick Township, NJ Contractor ROXBURY ENERGY GROUP
Address 2715 HOOPER AVE SUITE 2B BRICK NJ 08723
Owner in Fee KENNEDY MALL ASSOCIATES
641 SHUNPIKE RD. CHATHAM NJ 07928 Telephone: (732) 202-6908
Lic. No. or Bldrs. Reg. No. _____
Federal Employee. No. _____

Is hereby granted permission to perform the following work:

- | | | |
|---|--|--|
| ☐ BUILDING | ☒ PLUMBING | ☐ LEAD HAZARD ABATEMENT |
| ☐ ELECTRICAL | ☒ FIRE PROTECTION | ☐ DEMOLITION |
| ☐ ELEVATOR DEVICES | ☐ ASBESTOS ABATEMENT
(Subchapter 8 only) | ☐ OTHER |

DESCRIPTION OF WORK:

TENANT FIT UP - FANTASTIC SAMS ...UPDATE +B - HVAC

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$15,200

D. Nauman
Construction Official

12/12/18
Date

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

PAYMENTS (Office Use Only)

Building	\$0
Electrical	\$0
Plumbing	\$200
Fire Protection	\$250
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$28
CO Fee	
Other	\$0
Total	\$478
Check No. <u>254</u>	
Cash	\$0
Credit	\$0
Collected By <u>TJ</u>	

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☐ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☒ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.



CONSTRUCTION PERMIT

Date Issued 12/13/18
Control # C-18-003272
Permit # 18-3401

IDENTIFICATION Block: 670 Lot: 4 Qualifier _____
Work Site Location: 2770 HOOPER AVE. Brick Township, NJ Contractor ROXBURY ENERGY GROUP
Owner in Fee KENNEDY MALL ASSOCIATES Address 2715 HOOPER AVE SUITE 2B BRICK NJ 08723
641 SHUNPIKE RD. CHATHAM NJ 07928 Telephone: (732) 202-6908
Telephone: _____ Lic. No. or Bldrs. Reg. No. _____
Federal Employee No. _____

Is hereby granted permission to perform the following work:

- ☒ BUILDING ☒ PLUMBING ☐ LEAD HAZARD ABATEMENT
☒ ELECTRICAL ☒ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT (Subchapter 8 only) ☐ OTHER

DESCRIPTION OF WORK:

TENANT FIT UP - FANTASTIC SAMS

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$95,550

D. J. Quinlan
Construction Official

12/12/18
Date

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

PAYMENTS (Office Use Only)

Building	\$2,568
Electrical	\$490
Plumbing	\$297
Fire Protection	\$116
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$182
CO Fee	\$150.00
Other	\$0
Total	\$3,803
Check No.	<u>254</u>
Cash	\$0
Credit	\$0
Collected By	<u>TJ</u>

175
3878

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 15:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

☐ Required inspections for all subcodes for one- and two-family dwellings are as follows:

1. The bottom of footing trenches before placement of footings, except that in cases of pile foundations, inspections shall be made in accordance with the requirements of the building subcode.
2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and/or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☒ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.



PERMIT UPDATE

Date Update Issued 12/12/18
Control # C-18-003272+A
Permit # +A

183401

IDENTIFICATION Block: 670 Lot: 4 Qualifier _____
Work Site Location: 2770 HOOPER AVE. Brick Township, NJ Contractor ROXBURY ENERGY GROUP
Owner in Fee KENNEDY MALL ASSOCIATES Address 2715 HOOPER AVE SUITE 2B BRICK NJ 08723
641 SHUNPIKE RD. CHATHAM NJ 07928 Telephone: (732) 202-6908
Telephone: _____ Lic. No. or Bldrs. Reg. No. _____
Federal Employee No. _____

Is hereby granted permission to perform the following work:

- ☐ BUILDING ☐ PLUMBING ☐ LEAD HAZARD ABATEMENT
☒ ELECTRICAL ☒ FIRE PROTECTION ☐ DEMOLITION
☐ ELEVATOR DEVICES ☐ ASBESTOS ABATEMENT (Subchapter 8 only) ☐ OTHER

DESCRIPTION OF WORK:

TENANT FIT UP - FANTASTIC SAMS ...UPDATE +A - ALARMS

Note: If construction does not commence within one (1) year of date of issuance, or if construction ceases for a period of six (6) months, this permit is void.

Estimated Cost of Work \$2,875

D. Durman Construction Official

Date 12/12/18

U.C.C. F170
equiv (rev 1/04)

1 WHITE - INSPECTOR

2 CANARY - OFFICE

3 PINK - TAX ASSESSOR

4 GOLD - APPLICANT

PAYMENTS (Office Use Only)

Building	\$0
Electrical	\$150
Plumbing	\$0
Fire Protection	\$116
Elevator Devices	\$0
Other	\$0.00
DCA Training Fee	\$6
CO Fee	\$0
Other	\$0
Total	\$272
Check No. <u>234</u>	
Cash	\$0
Credit	\$0
Collected By <u>TJ</u>	

REQUIRED INSPECTIONS

Construction work must be inspected in accordance with the State Uniform Construction Code Regulations N.J.A.C. 5:23-2.18. This agency will carry out such periodic inspections during the progress of work as are necessary to insure that the work installed conforms with the requirements of the Uniform Construction Code.

The owner or other responsible person in charge of work must notify this agency when work is ready for any required inspections specified below. Requests for inspections must be made at least 24 hours prior to the time the inspection is desired. Inspections will be performed within three business days of the time for which they are requested. The work must not proceed in a manner which will preclude the inspection until it has been made and approval granted.

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2. Foundations and all walls up to grade level prior to back filling.
3. All structural framing, connections, wall and roof sheathing and insulation; electrical rough wiring, panel and service installation; rough plumbing. The framing inspection shall take place after the rough electrical and plumbing inspections and after the installation of the heating, ventilation and /or air conditioning duct system. The insulation inspection shall be performed after all other subcode rough inspections and prior to the installation of any interior finish material.
4. Installation of all finished materials, sealings of exterior joints, plumbing piping, trim and fixtures; electrical wiring, devices and fixtures; mechanical systems equipment.

Additional required inspections for all subcodes of construction, for other than one- and two-family dwellings, are fire suppression systems, heat producing devices and Barrier Free subcode accessibility, if applicable.

☐ Required special inspections. The applicant by accepting the permit will be deemed to have consented to these requirements:

☒ A final inspection is required for each applicable subcode area before a final Certificate of Occupancy or Approval may be issued. The final inspections include the installation of all interior and exterior finish materials, sealing of exterior joints, mechanical system and other required equipment; electrical wiring, devices and fixtures; plumbing pipes, trim and fixtures; tests required by any provision of the adopted subcodes, Barrier Free accessibility, if applicable; and verification of compliance with NJAC 5:23-3.5, "Posting structures".

☒ A complete copy of released plans must be kept on the job site.

If you do not understand any of this information, please ask.

**State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs**

THIS IS TO CERTIFY THAT THE
Board of Exam. of HVACR Contractors

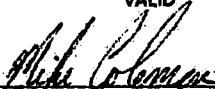
HAS LICENSED

MICHAEL S. COLEMAN
301 Monmouth Road
Freehold NJ 07728

FOR PRACTICE IN NEW JERSEY AS A(N): Master HVACR Contractor

07/26/2018 TO 06/30/2020

VALID


Signature of Licensee/Registrant/Certificate Holder

19HC00127900

LICENSE/REGISTRATION/CERTIFICATION #


ACTING DIRECTOR

NOT AN
ELECTRICIAN'S
OR PLUMBER'S
LICENSE

**State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs**

THIS IS TO CERTIFY THAT THE
Division of Consumer Affairs

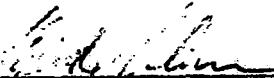
HAS REGISTERED

MICHAEL COLEMAN
Michael Coleman
301 Monmouth Road
Freehold NJ 07728

FOR PRACTICE IN NEW JERSEY AS A(N): Home Improvement Contractor

03/29/2018 TO 03/31/2019

VALID


Signature of Licensee/Registrant/Certificate Holder

13VH05942600

LICENSE/REGISTRATION/CERTIFICATION #


ACTING DIRECTOR

Job Name:

System Reference:

Date:



GENERAL FEATURES

- Dual set point functionality
- Multiple fan speed settings
- Auto fan mode
- 9-7/8" (250mm) high for low ceiling heights
- Built-in condensate lift; lifts to 27-9/16" (700 mm)
- Ducted fan coil supporting multiple configurations for flexible installation

OPTIONS

- ☐ External Heater Adapter.....CN24RELAY-KIT-CM3
- ☐ Filter Box (Includes 2" MERV 13 filter).....FBM2-1

SPECIFICATIONS

Capacity*

Cooling.....	12,000 Btu/h
Heating.....	13,500 Btu/h

Power

Power Source.....	208 / 230V, 1-phase, 60Hz
-------------------	---------------------------

Power Consumption

Cooling.....	0.09 kW
Heating.....	0.07 kW

Current

Cooling.....	0.66 / 0.62 A
Heating.....	0.55 / 0.51 A

Minimum Circuit Ampacity (MCA).....1.20 A

Maximum Overcurrent Protection (MOCP) Fuse.....15 A

External Finish.....Galvanized-steel Sheet

External Dimensions

Inches.....	9-7/8 H x 27-9/16 W x 28-7/8 D
mm.....	250 H x 700 W x 732 D

Net Weight.....49 lbs. / 22 kg

Coil Type.....Cross Fin
(Aluminum Plate Fin and Copper Tube)

Fan

Type x Quantity.....	Sirocco Fan x 1
Airflow Rate (Low-Mid-High).....	265 - 318 - 371 CFM
External Static Pressure.....	0.14 - 0.20 - 0.28 - 0.40 - 0.60" WG
Motor Type.....	DC Motor

Air Filter.....Polypropylene Honeycomb

Refrigerant Piping Dimensions

Liquid (High Pressure).....	1/4" / 6.35 mm (Brazed)
Gas (Low Pressure).....	1/2" / 12.7 mm (Brazed)

Drainpipe Dimension.....O.D. 1-1/4" / 32 mm

Sound Pressure Levels

Low-Mid-High.....	28 - 30 - 34 dB(A)
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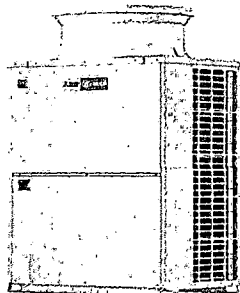
* Cooling / Heating capacity indicated at the maximum value at operation under the following conditions:

Cooling Indoor: 80° F (27° C) DB / 67° F (19° C) WB,
Cooling Indoor: Outdoor 95° F (35° C) DB
Heating Indoor: 70° F (21° C) DB,
Heating Outdoor 47° F (8° C) DB / 43° F (6° C) WB

Job Name:

System Reference:

Date:



**OUTDOOR VRF HEAT PUMP WITH
HEAT RECOVERY SYSTEM**

UNIT OPTION

- ☐ Standard Model.....PURY-P96TLMU-A
☐ Seacoast (BS) Model.....PURY-P96TLMU-A-BS

ACCESSORIES

- ☐ Joint Kit.....for details see Pipe Accessories Submittal
☒ BC Controller (required).....for details see BC Controller Submittals
☐ Low Ambient Kitfor details see Low Ambient Kit Submittal
☐ Snow/Hail Guards Kit.....for details see Snow/Hail Guards Kit Submittal
☐ Base Pan Heater Kit.....for details see Base Pan Heater Kit Submittal

Specifications		Model Name
Unit Type		PURY-P96TLMU-A (-BS)
Nominal Cooling Capacity (208/230V)	Btu/h	96,000
Nominal Heating Capacity (208/230V)	Btu/h	108,000
Operating Temperature Range *1	Cooling (Outdoor) *2	23~126° F (-5~52° C) DB
	Heating (Outdoor)	-13~60° F (-25~15.5° C) WB
External Dimensions (H x W x D)	In. (mm)	64-31/32 x 48-1/16 x 29-5/32 (1,650 x 1,220 x 740)
Net Weight	Lbs. (kg)	503 (228)
External Finish		Pre-coated galvanized steel sheet
Electrical Power Requirements	Voltage, Phase, Hertz	208 / 230V, 3-Phase, 60Hz
Minimum Circuit Ampacity (MCA)	A	33 / 30
Maximum Overcurrent Protection (MOP)	A	50 / 50
Piping Diameter (Brazed) (In. / mm)	Liquid (High Pressure)	3/4 (19.05)
	Gas (Low Pressure)	7/8 (22.2)
Max. Total Refrigerant Line Length	Ft.	1,804
Max. Refrigerant Line Length (Between ODU & IDU)	Ft.	541
Max. Control Wiring Length	Ft.	1,640
Indoor Unit	Total Capacity	50~150% of outdoor unit capacity
	Model / Quantity	P06~P96/1~24
Sound Pressure Levels	dB(A)	58.0
Fan		
Type x Quantity		Propeller fan x 1
Airflow Rate	CFM	6,550
External Static Pressure	In. WG	Selectable; 0, 0.12 or 0.24"WG; factory set to 0"W.G.
Compressor Operating Range		13% to 100%
Compressor Type x Quantity		Inverter scroll hermetic compressor
Refrigerant		R410A; 17 lbs. + 10 oz. (8.0 kg)
Protection Devices	High Pressure	High pressure sensor, High pressure switch at 4.15 MPa (601 psi)
	Inverter Circuit (Comp. / Fan)	Over-current protection
	Fan Motor	Thermal switch
AHRI Ratings (Ducted/Non-Ducted)	EER	12.0 / 14.1
	IEER	24.1 / 27.0
	COP	3.53 / 4.00
	SCHE	23.5 / 31.5

NOTES:

*1. When applying product below -4° F, consult your design engineer for cold climate application best practices, including the use of a backup source for heating.

*2. For details on extended cooling operation range down to -10° F DB, see Low Ambient Kit Submittal.

Model: PURY-P96TLMU-A(-BS) – DIMENSIONS

Unit: mm (in.)

<Accessories>

•Connecting pipe

<Low pressure>

- Pipe (IDø28.58(1-1/8)×ODø22.2(7/8)) ... 1pc.
- Elbow(IDø28.58(1-1/8)×ODø28.58(1-1/8)) ... 1pc.

<High pressure>

- Pipe (IDø25.4(1)×IDø19.05(3/4)) ... 1pc.
- Pipe (IDø25.4(1)×ODø19.05(3/4)) ... 1pc.

Note1, Please refer to the engineering manual for information regarding necessary spacing around the unit and foundation work. Outdoor unit must be mounted at least 12" off the ground or 12" above the highest average snow depth, whichever is greater.

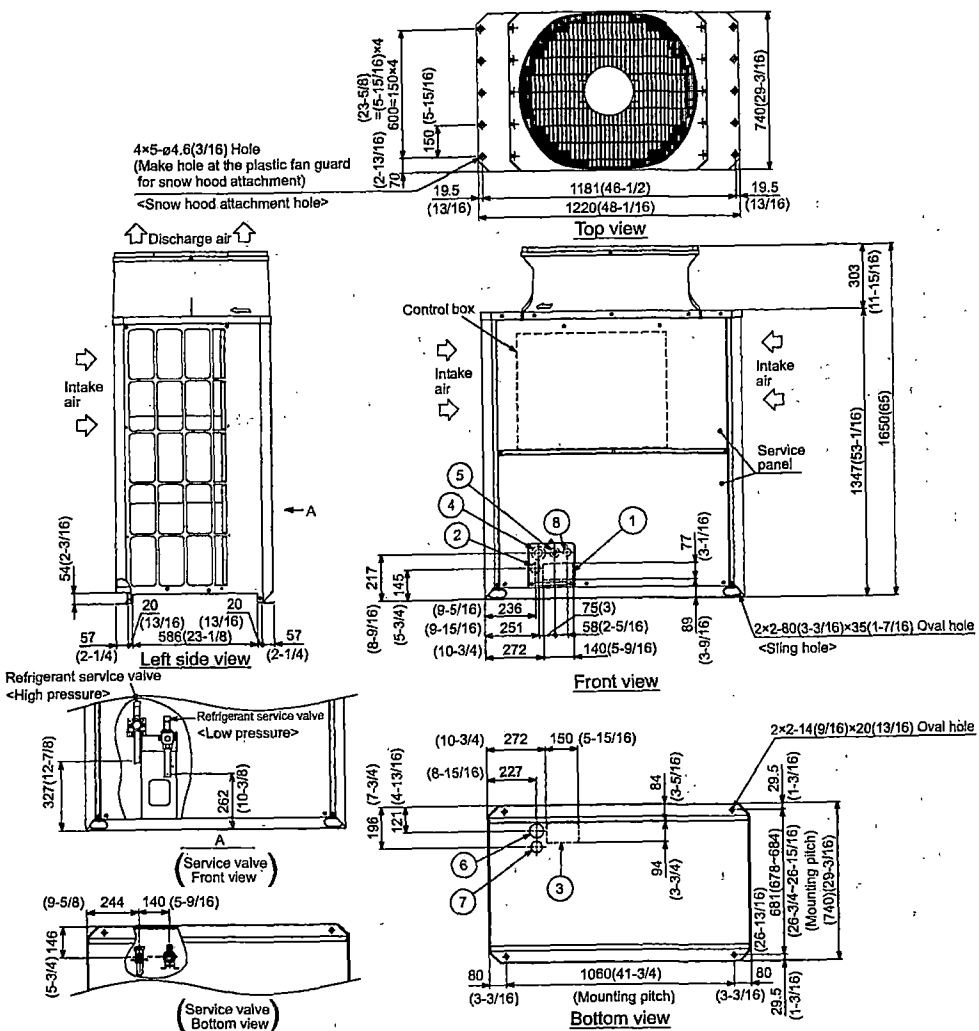
2. At brazing of pipes, wrap the refrigerant service valve with wet cloth and keep the temperature of refrigerant service valve under 120°C(248 °F).

Connecting pipe specifications

Model	Diameter			
	Refrigerant pipe		Service valve	
	High pressure	Low pressure	High pressure	Low pressure
PURY-P96TLMU	ø19.05(3/4) Braze	ø22.2(7/8) Braze	ø25.4(1) (1)	ø28.58(1-1/8)

*1 Use the included connecting pipe and connect to the refrigerant service valve piping.

NO.	Usage	Specifications
①	For pipes	Front through hole 140 × 77 Knockout hole (5-9/16)(3-1/16)
②		Front through hole (Uses when twinning kit (optional parts) is mounted.) ø45 Knockout hole (1-13/16)
③		Bottom through hole 150 × 94 Knockout hole (5-15/16)(3-3/4)
④	For wires	Front through hole ø62.7 or ø34.5 Knockout hole (2-1/2)(1-3/8)
⑤		Front through hole ø43.7 or ø22.2 Knockout hole (1-3/4)(7/8)
⑥		Bottom through hole ø65 Knockout hole (2-9/16)
⑦	For transmission cables	Bottom through hole ø52 Knockout hole (2-1/16)
⑧		Front through hole ø34 Knockout hole (1-3/8)



NOTES:

- **SEACOAST PROTECTION**
- Anti-corrosion Protection: A coating treatment is applied to condenser coil for protection from air contaminants.
- Standard: Salt Spray Test Method - no unusual rust development to 480 hours.
- Sea Coast (BS): Salt Spray Test Method (JISA 9002) - no unusual rust development to 960 hours.



COOLING & HEATING

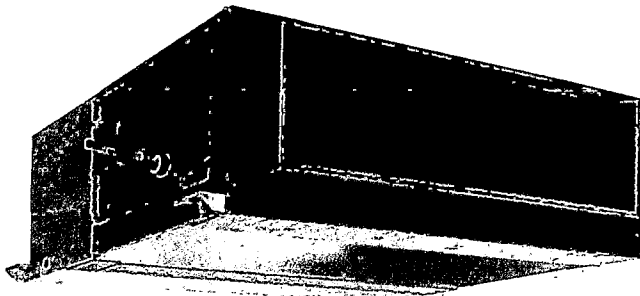
1340 Satellite Boulevard, Suwanee, GA 30024
Toll Free: 800-433-4822 www.mehvac.com



Job Name:

Schedule Reference:

Date:

**GENERAL FEATURES**

- Single phase
- Dual set point functionality
- DC Motor
- Static Pressure Features
 - Adjustable up to 1"
 - No change in static pressure with voltage change
- Side access control panel
- Flexibility in duct configuration
- Choice of fan speed

OPTIONS

- ☐ Joint Adapter (Port Connector).....CMY-R160C-J
- ☐ Drain pump.....PAC-KE05DM-F
- ☐ External Heater Adapter.....CN24RELAY-KIT-CM3
- ☐ Filter Box (With 4" MERV 13 filter).....FBH4-4

SPECIFICATIONS**Capacity***

Cooling.....72,000 Btu/h
 Heating.....80,000 Btu/h

Power

Power Source.....208 / 230V, 1-phase, 60 Hz

Power Consumption

Cooling.....0.63 kW
 Heating.....0.63 kW

Current

Cooling.....3.67/3.32A
 Heating.....3.67/3.32A
 Minimum Circuit Ampacity (MCA).....7.7 A
 Maximum Overcurrent Protection (MOCP) Fuse.....15 A

External Finish.....Galvanized-steel Sheet

External Dimensions

Inches.....18-9/16 H x 49-1/4 W x 44-1/8 D
 mm.....470 H x 1,250 W x 1,120 D

Net Weight

Unit.....214 lbs / 97 kg

Coil Type

Cross Fin
 (Aluminum Plate Fin and Copper Tube)

Fan

Type x Quantity.....Sirocco Fan x 2
 Airflow Rate (Low-Mid-High).....1,766 - 2,154 - 2,542 CFM
 External Static Pressure.....0.20-0.40-0.60-0.80-1.00 "WG
 (External static pressure is factory set to 0.60" WG)

Motor

Type.....DC Brushless Motor

Refrigerant Piping Dimensions

Liquid (High Pressure).....3/8" / 9.52 mm (Brazed)
 Gas (Low Pressure).....3/4" / 19.05 mm (Brazed)

Drainpipe Dimension.....O.D. 1-1/4" / 32 mm

Sound Pressure Levels (Low-Mid-High)

Low-Mid-High.....36-39-43dB(A)

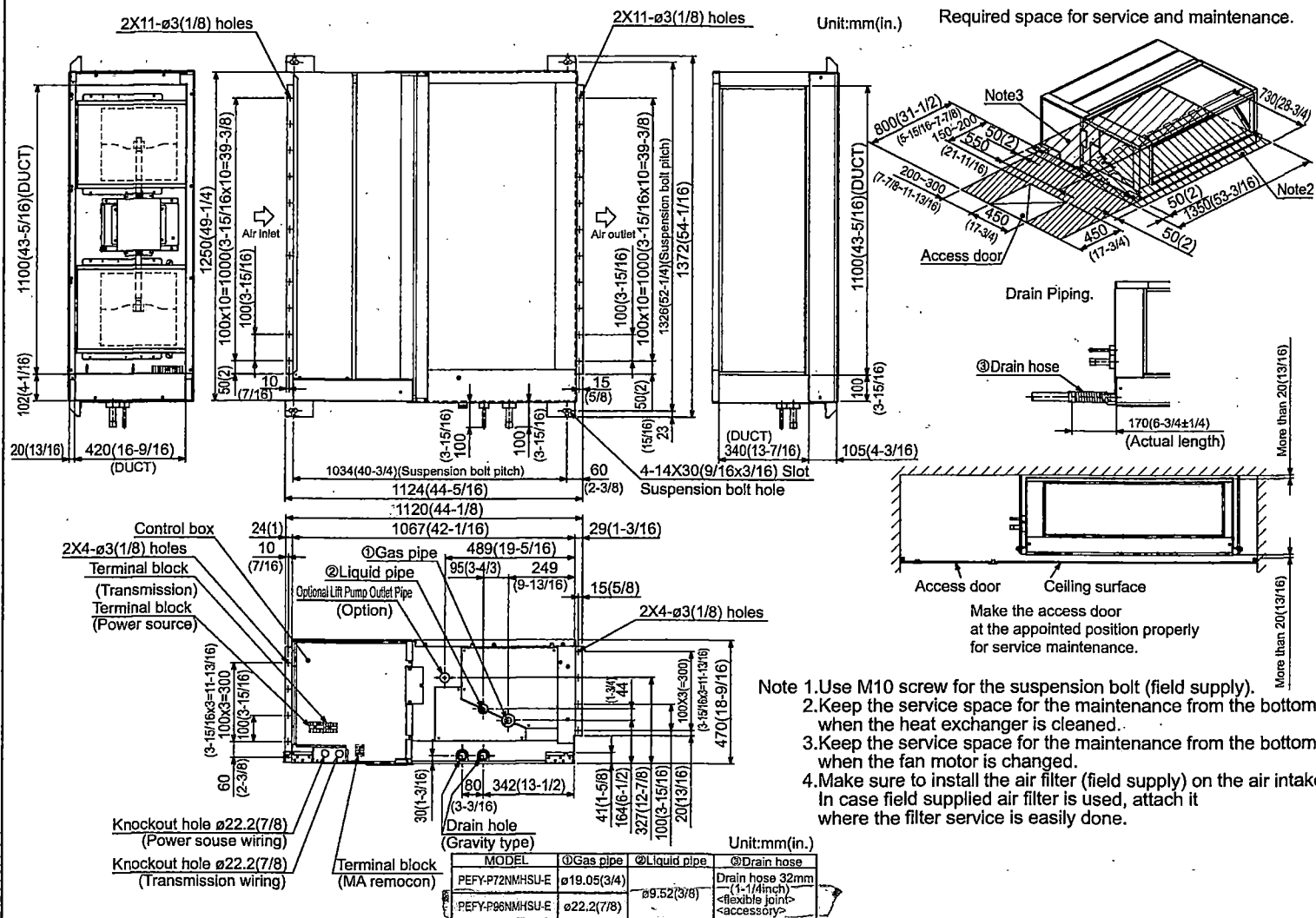
* Cooling / Heating capacity indicated at the maximum value at operation under the following conditions:

Cooling: Indoor 80°F (27°C) DB / 67°F (19°C) WB, Outdoor 95°F (35°C) DB
 Heating: Indoor 70°F (21°C) DB, Outdoor 47°F (8°C) DB / 43°F (6°C) WB

Notes:



PEFY-P72.96NMHSU-E



Intertek

FORM# PEFY-P72NMHSU-E - 201405

Specifications are subject to change without notice.

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COOLING & HEATING

1340 Satellite Boulevard
 Suwanee, GA 30024
 Toll Free: 800-433-4822
 www.mhiavac.com

**State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs**

THIS IS TO CERTIFY THAT THE
Board of Examiners of Electrical Contractors

HAS LICENSED

**ALTERNATE ENERGY & ELECTRIC LLC
JAMES K CANNON
420 Valley Way
Brick NJ 08723**

FOR PRACTICE IN NEW JERSEY AS A(N): Electrical Business Permit

04/24/2018 TO 03/31/2021
VALID

34EB00901100
LICENSE/REGISTRATION/CERTIFICATION #


Signature of Licensee/Registrant/Certificate Holder


ACTING DIRECTOR

**State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs**

THIS IS TO CERTIFY THAT THE
Board of Examiners of Electrical Contractors

HAS LICENSED

**James K. Cannon
420 Valley Way
Brick NJ 08723**

FOR PRACTICE IN NEW JERSEY AS A(N): Electrical Contractor

04/24/2018 TO 03/31/2021
VALID

34EI00901100
LICENSE/REGISTRATION/CERTIFICATION #


Signature of Licensee/Registrant/Certificate Holder


ACTING DIRECTOR



Brick Township
401 Chambers Bridge Rd.

Brick, NJ 08723
(732) 262-1336

Date Issued:

12/13/18

Application Number:

ZA-18-01062

Application Date:

9/4/2018

Project Number:

Permit Number:

ZP-18-01409

Fee:

\$75.00

Zoning Permit

Worksite **2770 HOOPER AVE.**
Location: **Unit 12**
Brick Township, NJ 08723

Owner: **KENNEDY MALL ASSOCIATES**
Address: **641 SHUNPIKE RD.**
CHATHAM, NJ 07928

Applicant: **Rita Arlotta**
Address: **15 Fella Street**
Howell, NJ 07731

Block: **670** Lot: **4** Qualifier: _____ Zone: **B-3**

This Certifies that an application for the issuance of a Zoning Permit has been examined.

Present Use: **Fitness Center**

☐ Non Conforming Use

☐ Non Conforming Structure

Proposed Use: **Hair Salon/Barber Shop (Fantastic Sams Salon)**

Work Description:

Rehabilitation, Tenant Fit-Up - Interior alterations for new tenant. Changing from Brick Fitness for Women to "Fantastic Sams Salon".

Additional Zoning Permit is required for additional work or signage.

Application Approved Date: 9/6/2018

Upon review it was determined that the Zoning Permit:

☒ Permitted by Ordinance

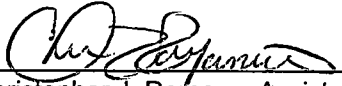
☐ Permitted by Variance approved on: _____

☐ Approved with Conditions

☐ Valid Nonconforming Use/Structure is established by

☐ Zoning Board of Adjustment

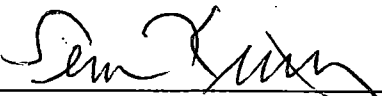
☐ Zoning Officer



Christopher J. Romano, Assistant Zoning Officer

9/6/2018

Date

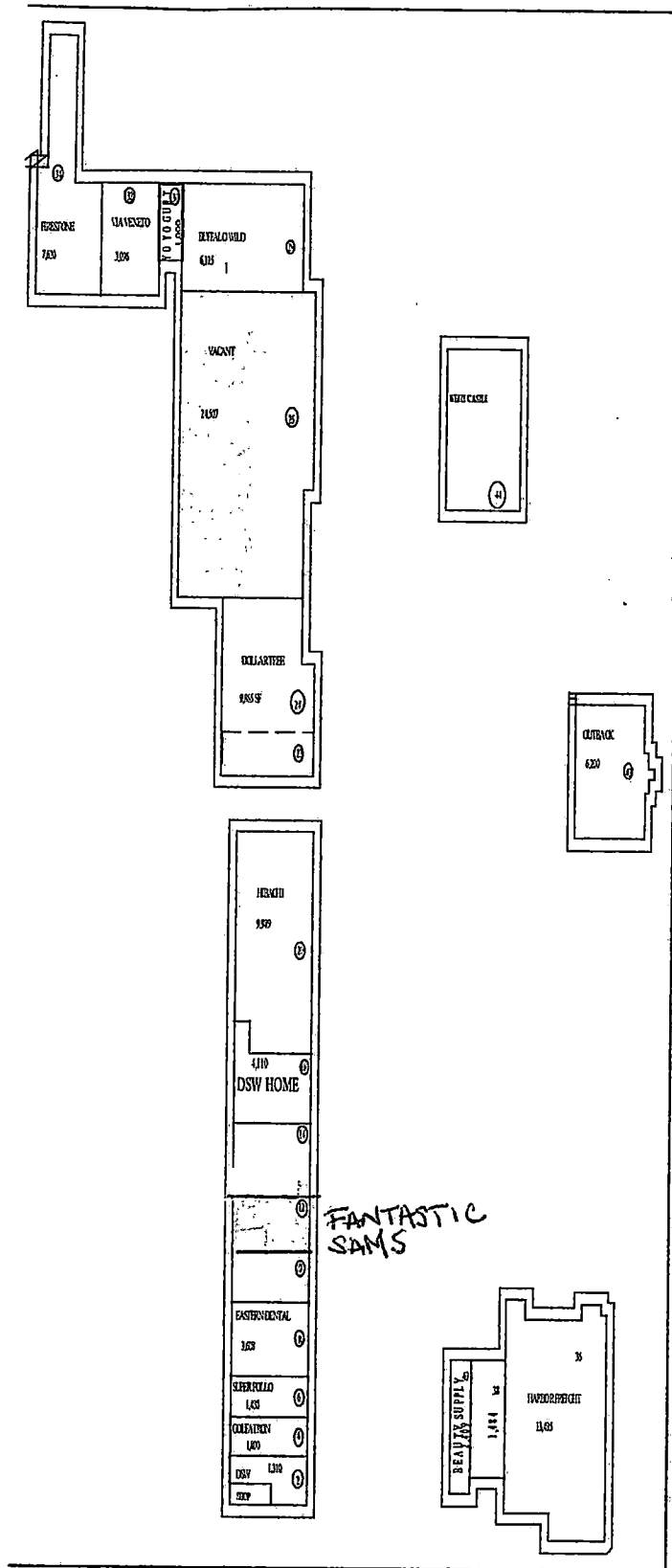


Sean Kinnevy, Zoning Officer

9/6/18

Date

RIVERWALK BRICK, NEW JERSEY



NEW

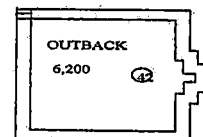
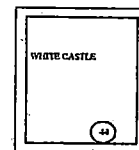
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4	GOLFATRON	1,800
6	SUPER POLLO	1,480
8	EASTERN DENTAL	3,608
10	VACANT	4,184
12	FANTASTIC SAMS	1,720
14	CELITO LINDO	3,100
18	DSW HOMES	4,110
20	HIBACHI	9,989
22	DOLLAR TREE	9,865
24		
26	VACANT	24,507
28	BUFFALO WILD WINGS	6,125
30	YO FRESH YOGURT	1,000
32	VIA VENETO	3,096
34	FIRESTONE #103071	7,620
36	HARBOR FREIGHT	13,495
38	VACANT	1,484
40	BEAUTY SCHOOL	2,409
42	OUTBACK	6,200
44	WHITE CASTLE	2,700
50	CARECYCLE, INC	0

110,208

31,895

28.94%

vacant



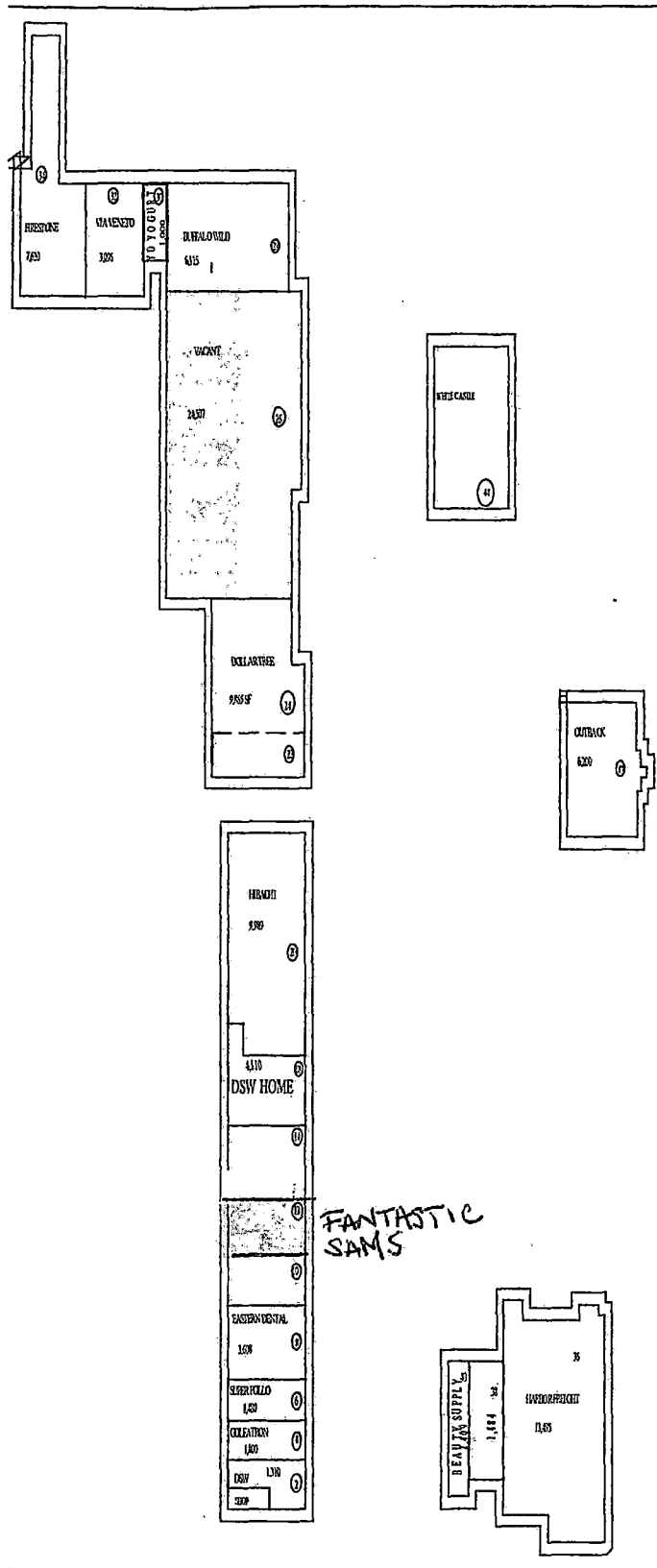
Zoning Review

Approval

By: cu Tenants fit up
 Date: 9-6-18

3/1/2018

RIVERWALK BRICK, NEW JERSEY



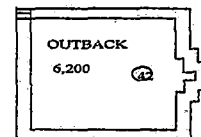
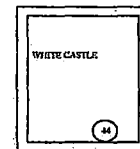
NEW

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110,208

31,895

vacant 28.94%



Zoning Review

Approval

By: Cu Tenant fit up

Date: 9-6-18

3/1/2018



State of New Jersey
Department of Community Affairs
Division of Fire Safety



Hereby Issues To
AFA PROTECTIVE SYSTEMS INC
Fire Protection Equipment Contractor Business Permit
In The Following Fire Protection Areas:
Fire Alarm System

STATE OF NEW JERSEY
DIVISION OF FIRE SAFETY

This is to certify that a Fire Protection Equipment Contractor Business Permit has been issued to:

AFA PROTECTIVE SYSTEMS INC

And is authorized to provide services on the following systems: **FAS**

08/23/2018 to 10/31/2021

Date Issued: **08/23/2018** Lapse Date: **10/31/2021**

P00-495

Permit ID

P00-495

Permit ID

08/23/2018 to 10/31/2021

Date Issued

Lapse Date

Sheila Y. Oliver
Commissioner

Fire Protection System Abbreviation Key:
AFPS-All Fire Protection Equipment Systems
FSS-Fire Sprinkler System
SHFSS-Special Hazard Fire Suppression System
FAS-Fire Alarm System
PFE-Portable Fire Extinguisher
KFSS-Kitchen Fire Suppression System

PLEASE DETACH HERE

Dear Contractor:

Congratulations on receiving a business permit as a Fire Protection Equipment Contractor. The business identified above is authorized by the New Jersey Department of Community Affairs to install, service, repair, inspect and maintain fire protection equipment on the systems/services identified on the permit. The services authorized by this permit are restricted to the Fire Protection Equipment services identified on the business permit application, and may be limited within each permit classification.

Let me commend you on your professional attitude and desire to provide a valuable service to the citizens of New Jersey. The business permit will be valid for a period of three years. At least one employee of the business must be certified within "each" specialty listed on the permit. An individual certified as a "All Fire Protection Equipment Systems" contractor is permitted to work on all fire protection equipment systems authorized by Public Law P.L. 2001, c. 289.

Please do not hesitate to contact our office if we may further assist you. Our mailing address is: Division of Fire Safety, Contractor Certification and Emblems Unit, P.O. Box 809, Trenton, New Jersey 08625-0809, or phone us at (609) 984-7860.

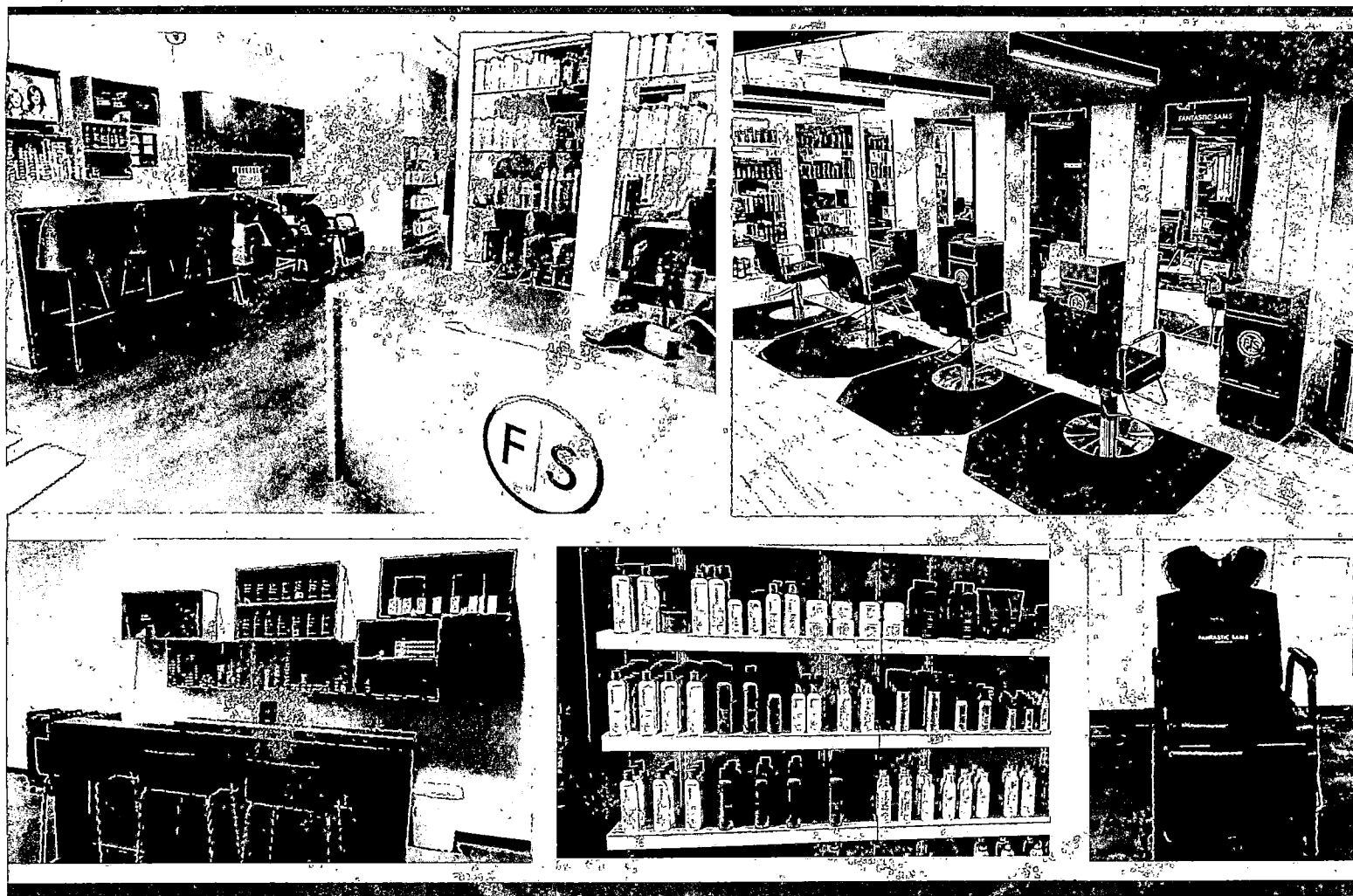
Sincerely,

Sheila Y. Oliver
Commissioner

FANTASTIC SAM^S

CUT & COLOR FILE COPY

Salon Design Manual



The Fantastic Sams® Design Manual

This document is copyrighted and is not to be reproduced, displayed or posted in any form or fashion without the permission of the Legal Department of Fantastic Sams® Franchise Corporation ("FSFC"). As a franchisee operating under the Fantastic Sams® Franchise System ("System"), you are being provided with this document for your sole use under the terms of your franchise/license agreement (the "Salon Agreement"). This document contains confidential information, proprietary information and trade secrets of FSFC. Unauthorized disclosure of this document, or any information in this document, is a violation of your Salon Agreement and will subject you to liability for violation of (i) the Salon Agreement, (ii) federal Economic Espionage Act of 1996, (iii) the Uniform Trade Secrets Act (including various state versions of the act), and other laws protecting confidential information, proprietary information and trade secrets. The violation of these laws will subject the violator(s) to criminal and civil penalties.

Introduction

Welcome to FANTASTIC SAMS®

This book has been prepared to assist you in the construction of the interior and exterior of your salon and will serve as the standard for the new Fantastic Sams® design. The salon's interior has been designed to be attractive and to create an inviting and comfortable environment for your guests.

Fantastic Sams® has designated suppliers and manufacturers for flooring, lighting, graphics, furnishings and other elements. These suppliers will provide you with stylish, durable and economical choices for your Fantastic Sams® salon interior. All suppliers are familiar with the requirements for meeting the brand standards.

This Manual is updated periodically, so please check with your Regional Director to see if this is the most recent version.

Please verify all pricing with the designated suppliers prior to ordering.

If you have any questions, contact your regional office. You may also contact the development team at The Salon Support Center:

Fantastic Sams Franchise Corporation

500 Cummings Center, Suite 1100

Beverly, MA 01915

Email: realestate@fantasticsams.com

Phone: (978) 232-5600

Table of Contents

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1,200 sq. ft. Floor Plan	1
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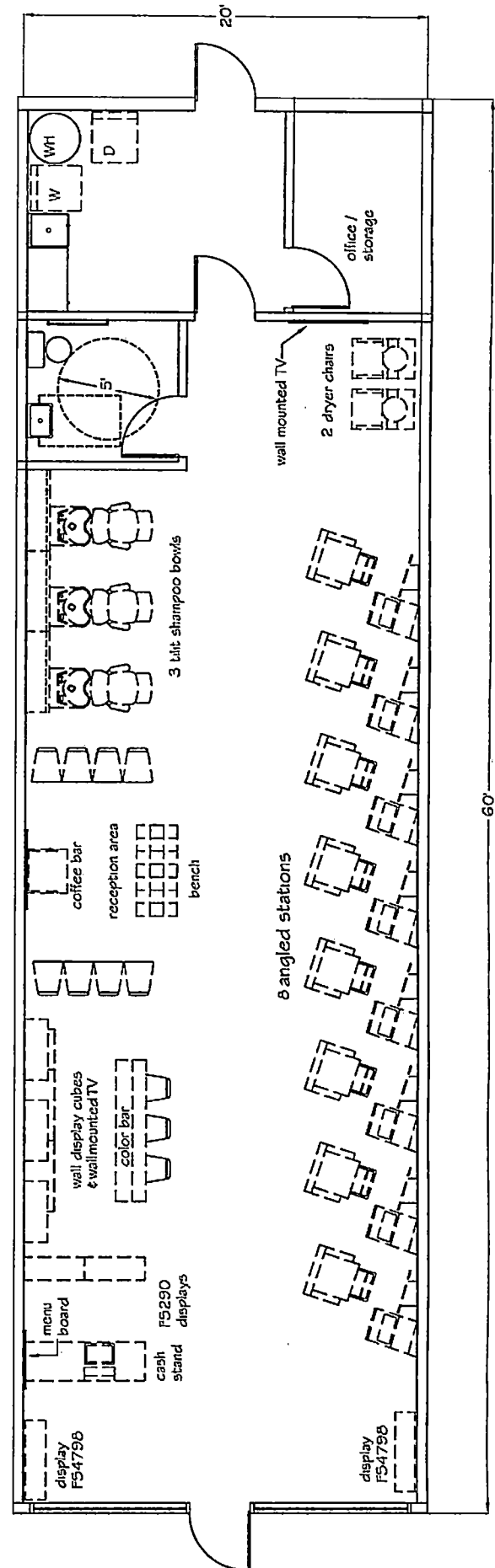
Typical Salon Layout

20' x 60' Salon 1,200 sq/ft

Rear Exit

NOTE: This Layout is a prototype of a typical salon floor plan. Your space and configuration may be different and the design will be adjusted accordingly upon approval by the FSFC Development team

Front Entrance



Elevation Sample- 1200 sq. ft.

SHAMPOO CABINETS

ANGLED ORIENTATION
(STANDARD STYLING STATION)

STYLING STATIONS AND
WALL FINISHES TO
CONTINUE - REFER TO
FLOOR PLAN FOR EITHER
ANGLED OR STRAIGHT
STATION ORIENTATION

STRAIGHT ORIENTATION
(ALTERNATE STYLING STATION)

FIN.
FLR.

0/0" = 1'-0"

ELV-WAL02 2015

5/8" = 1'-0"

Casework, Seating and Other Fixtures

You must place your order with our designated supplier, Kaemark. Use the floor plan created by our designer to determine what to order. It will show all of the casework and furniture components you will need, along with how they should be positioned in the new salon.

- To place the order, itemize all components and specify quantities as shown on the plan
- Complete a purchase order form
- Send the completed form, along with a copy of the plan, to Kaemark

Each salon must use the following Fantastic Sams® approved elements:

- Styling Stations
- Reception Desk
- Shampoo Stations
- Color Bar
- Additional Furniture

Requests to modify or change the items in this book must be approved by the FSFC Development Team.

Before the order is placed, Kaemark will provide an estimate of the total cost, including shipping. They require a 50% deposit for the total order as a down payment and the remaining 50% is required prior to shipping. Payment may be made by credit card or wire transfer. Credit Card payments may be assessed an additional fee.

Fulfillment will take between six and eight weeks from receipt of order. Allow adequate time for delivery to ensure that the salon buildout is completed on time.

*All casework is delivered in partially assembled form. Kaemark will send instructions for local contractors to install the casework.

Casework Finishes/ Colors

The finishes of all casework pieces will be in the following plastic laminates:

Styling Stations / Storage / Retail Displays

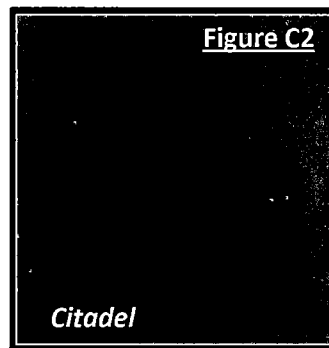
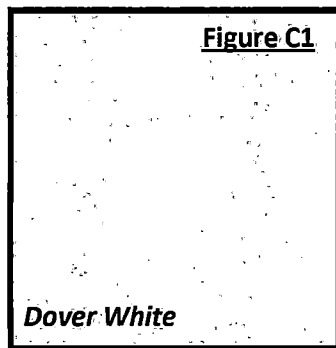
- Formica "Dover White" SW6385 (*Figure C1*)

All countertops and Color Bar

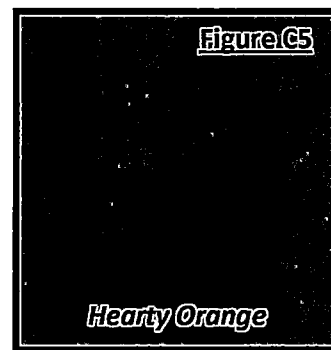
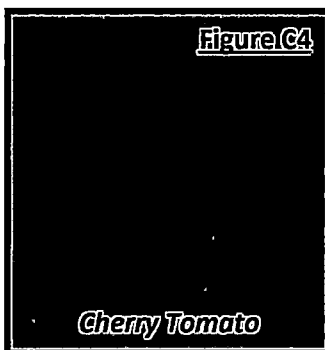
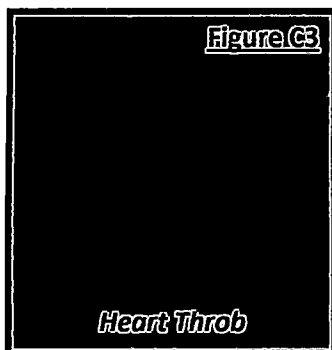
- Formica "Citadel" (*Figure C2*)

Color Bar Display Boxes

- Formica "Cherry Tomato" SW6864 (*Figure C3*)
- Formica "Heart Throb" SW6866 (*Figure C4*)
- Formica "Hearty Orange" SW6622 (*Figure C5*)



*colors are approximate



*colors are approximate

Casework

Furniture and Fixtures List

The following equipment is available. Pictures of each item are on the pages that follow.

Equipment	Supplier ID	Example
Styling Area		
Tower Styling Station w/ Lit Retail (LED Not Included)	FS-210	Figure S1
Flat Tower Styling Station	FS-210F	Figure S2
51" Base Flat Station	FS-08	Figure S3
Wall Hung Mirror w/ Storage Cabinet	FS-20	Figure S4
Farrah Styling Chair	FS-60	Figure S5
Mixology Area		
Color Bar w/ TV Cabinet	FS - COLORBAR	Figure CB1a
Client Seating Bar	FS-CB	Figure CB1b
Color Bar Credenza	FS-BB	Figure CB1c
Color Bar Stools	FS-61B	Figure CB2
TV	Sold Separately	-
Rolling Utility Cart	FS-3910	Figure CB3
Shampoo Area		
Complete Shampoo Cabinet w/ Tilt Bowl	FS-4101T	Figure SA1
Farrah Dryer Chair	FS-66	Figure SA2
KwikSet Dryer (Optional)	1990-G	Figure SA3
Farrah Shampoo Chair	FS-363	Figure SA4
Westfall Dryer Chair (Optional)	W-66	Figure SA5
Westfall Shampoo Chair	W-67	Figure SA6
Ionic Pro Prllabout Tourmaline Dryer	Sold Separately	Figure SA7
Reception Area		
Reception Desk with Drawer/Door Options	FS-40	Figure R1
Coffee Bar	FSP35	Figure R2
Reception Chair Red	FS-33-R	Figure R3
Reception Chair Black	FS-33-B	Figure R4
Reception Bench Red	FS-31-R	Figure R5
Reception Bench Grey	FS-31-GY	Figure R6
Retail Displays		
Wall Mounted Retail Display		Figure D1
Lighted Tower Retail Island	FS-290-ISL	Figure D2
36" Wall Mounted Retail Display	FS-39695-W	Figure D3
47" Wall Mounted Retail Display	FS-4795-W	Figure D4
47" Short Wall Mounted Retail Display	FS-4760-W	Figure D5
Floor Mats		
Fantastic Sams Horizontal Front Door Mat	FS-K3050H/B	Figure M1
Fantastic Sams Vertical Front Door Mat	FS-K3050H/N	Figure M2

Styling Area:

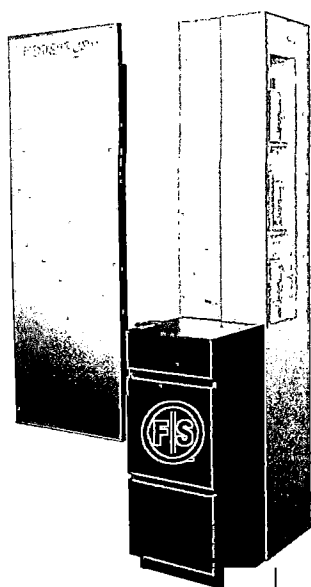


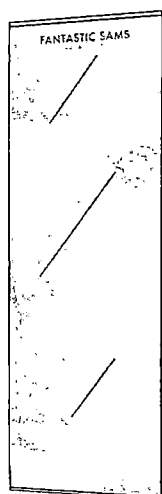
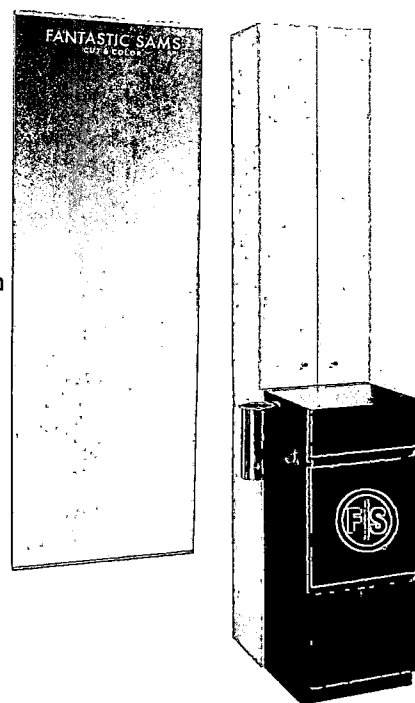
Figure S1

Angled Tower Station w/
Retail Display

*LED Light Tape not included; needs
to be ordered separately

Figure S2

Flat Tower Station



P3 Hanging pendant Light
Required for placement
over casework only station

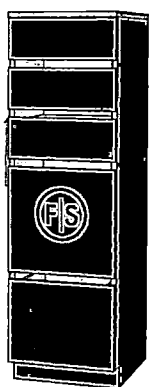


Figure S3

51" Flat Base Flat Station

Figure S4

Wall Hung Mirror
with storage cabinet

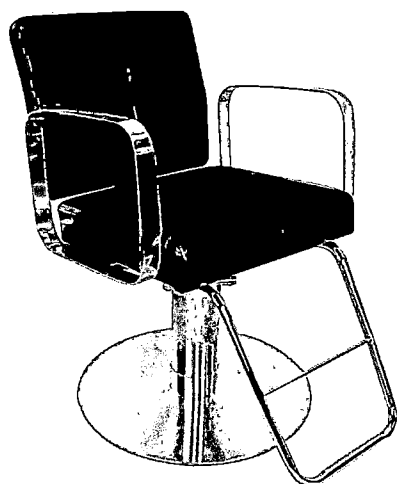
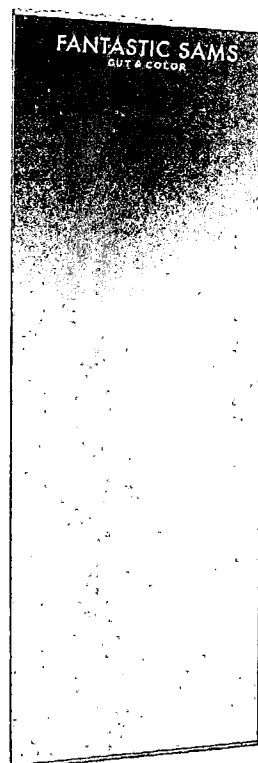


Figure S5

Styling Chair

*colors are approximate

Mixology Area:

Figure CB1 a
Complete Color Bar

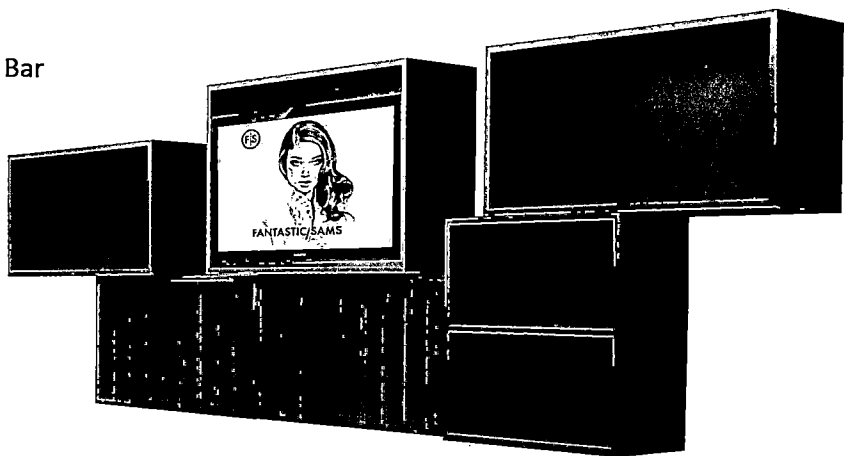


Figure CB b
Client Seating Bar

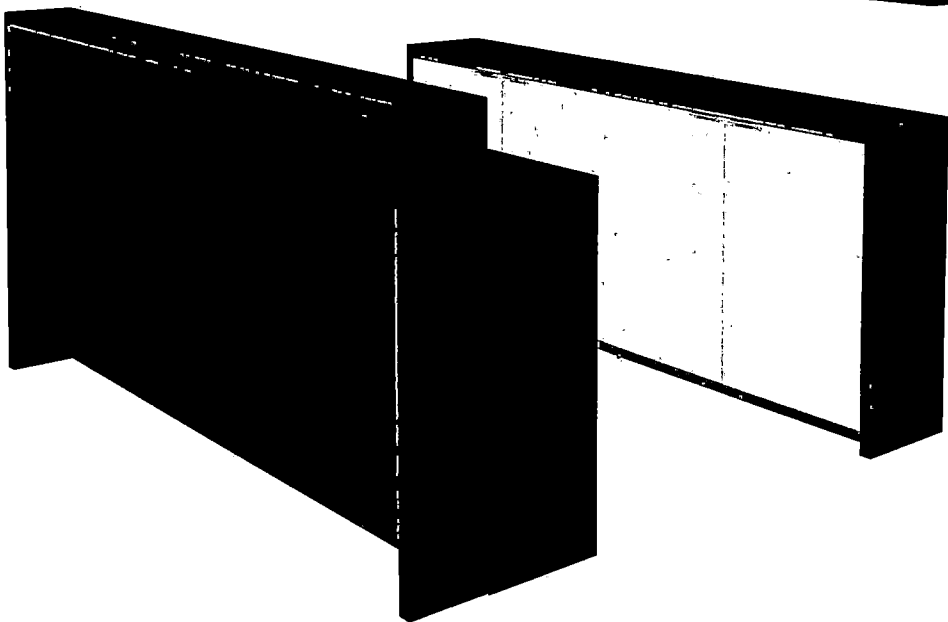
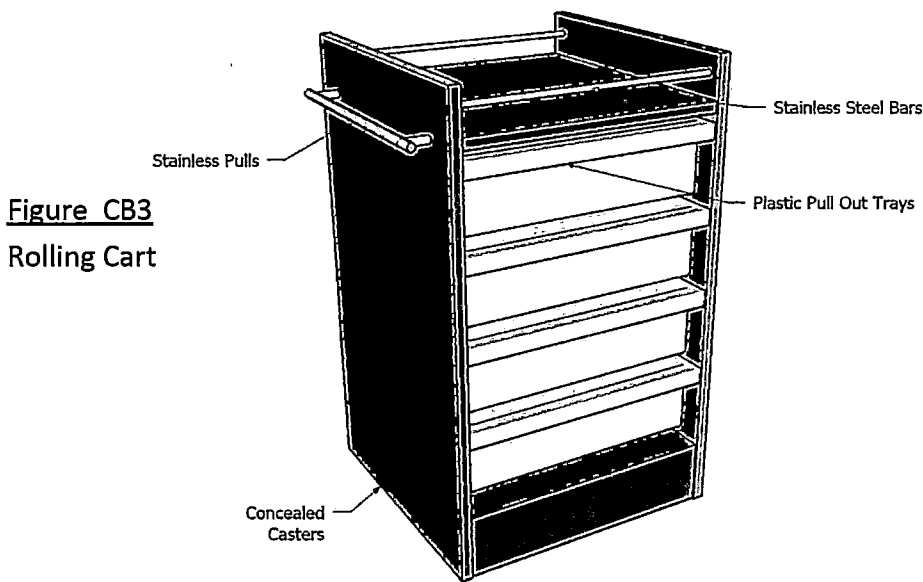


Figure CB c
Color Bar Credenza



*colors are approximate

Shampoo Area:

Figure SA 1

Complete Shampoo
Cabinet W/ Tilting Bowl

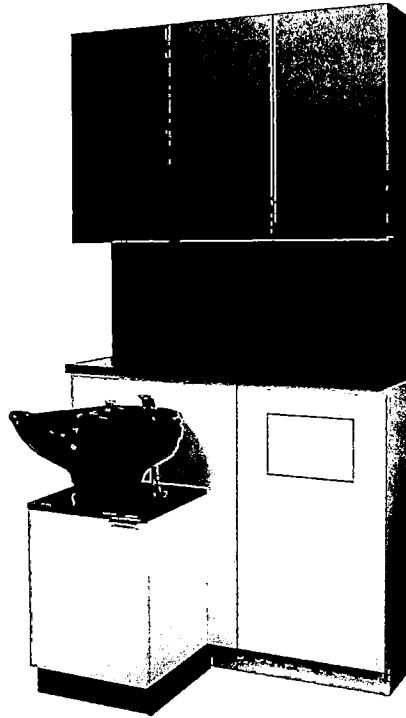


Figure SA 2

Farrah Dryer Chair
(optional)

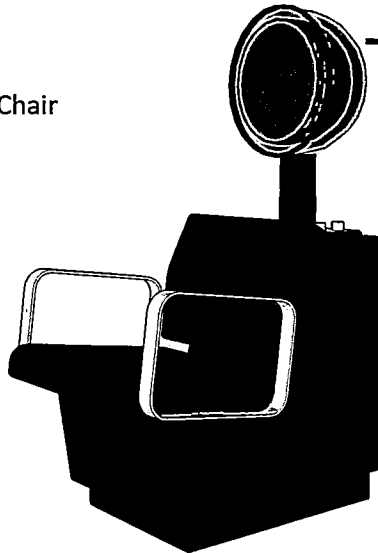


Figure SA 3

Kwikset Dryer

Figure SA 4

Westfall Dryer Chair
(optional)

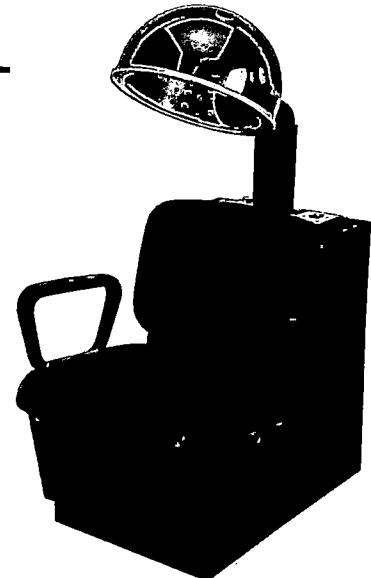


Figure SA 5

Farrah Shampoo Chair

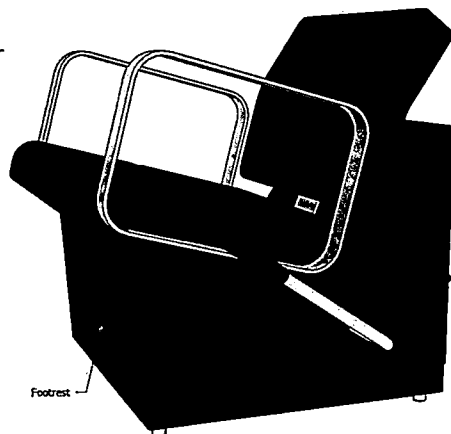


Figure SA 6

Westfall Shampoo Chair

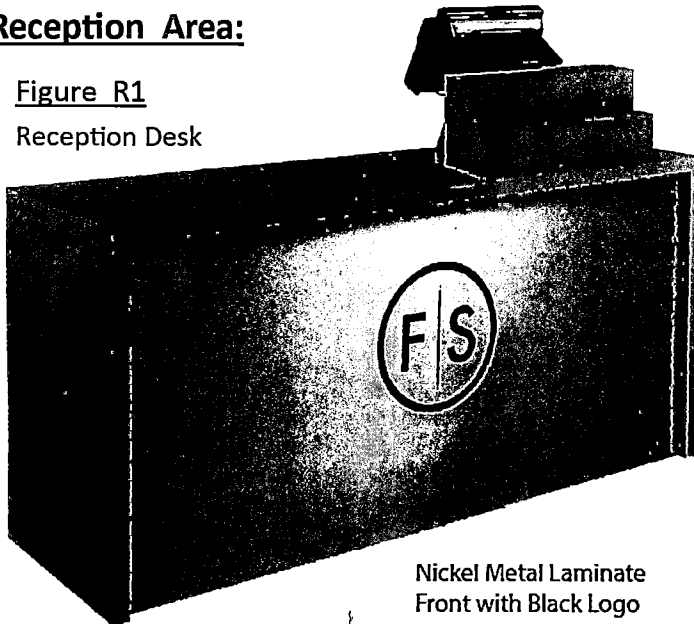


*colors are approximate

Reception Area:

Figure R1

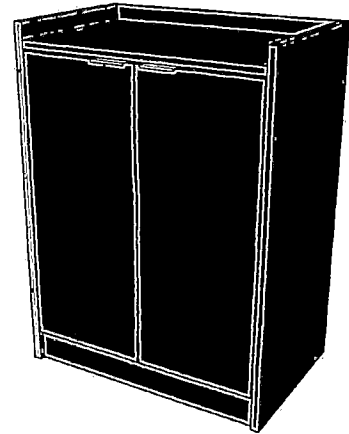
Reception Desk



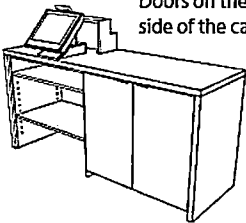
Nickel Metal Laminate
Front with Black Logo

Figure R2

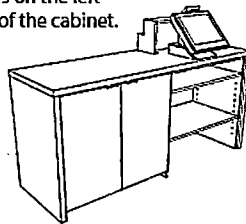
Coffee Bar



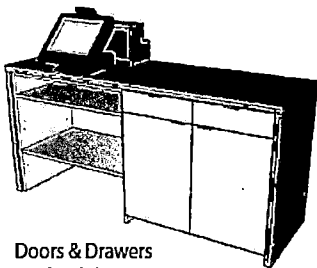
Doors on the right
side of the cabinet.



Doors on the left
side of the cabinet.



Doors & Drawers
on the right
side of the cabinet.



Doors & Drawers
on the left
side of the cabinet.

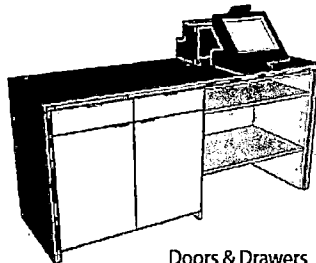


Figure R3

Reception Chair Red

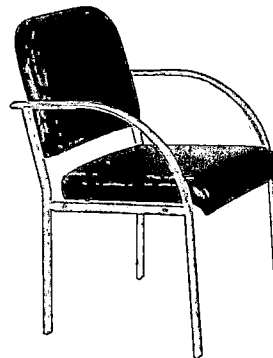


Figure R4

Reception Chair Black

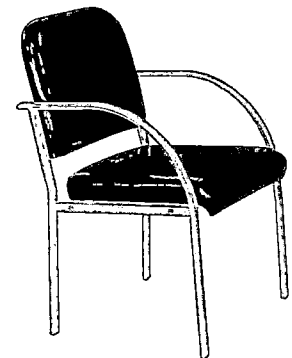


Figure R5

Reception Bench/Coffee Table—Grey

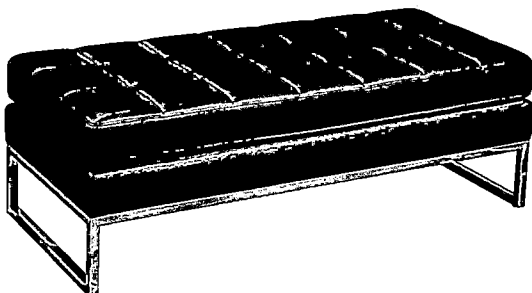
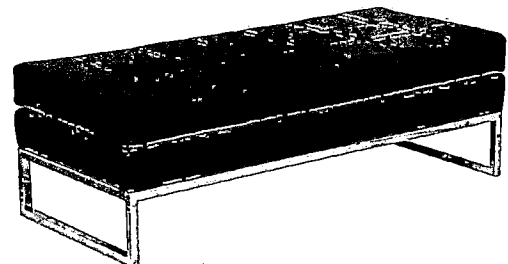


Figure R6

Reception Bench/Coffee Table —Red



*colors are approximate

Retail Displays

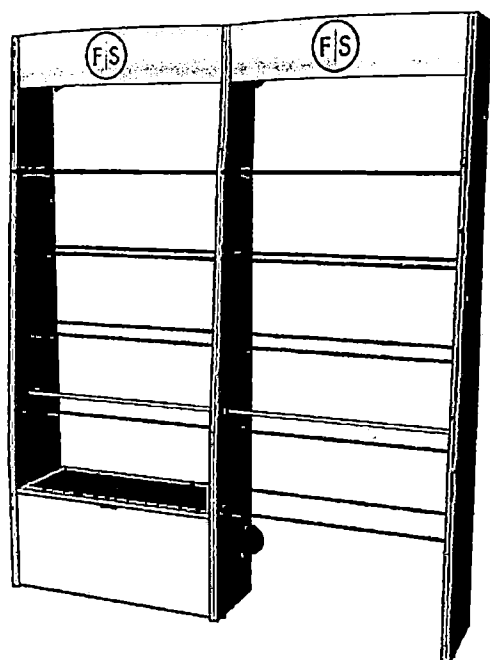


Figure D1
Wall Mounted Retail Display

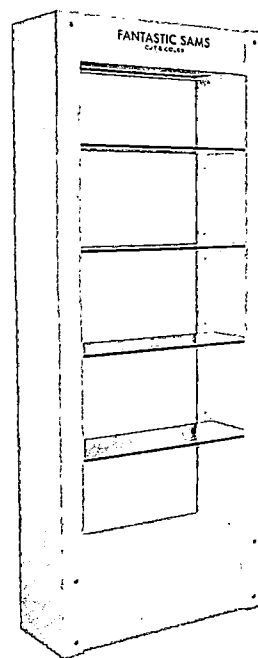


Figure D2
Lighted Retail Island

Figure D3
Wall Mounted Retail 47"

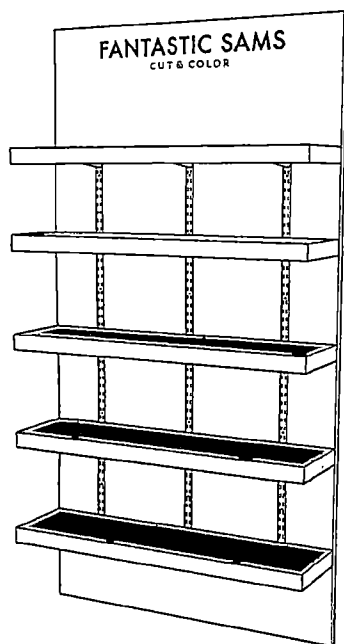


Figure D4
Wall Mounted Retail 36"

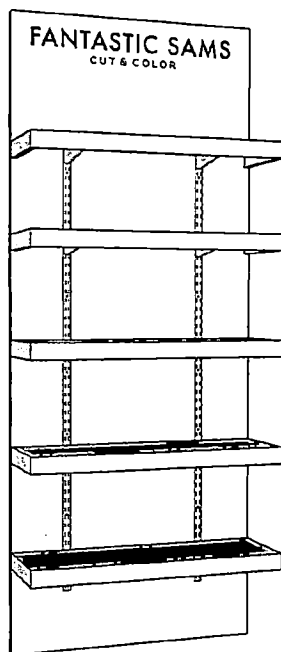
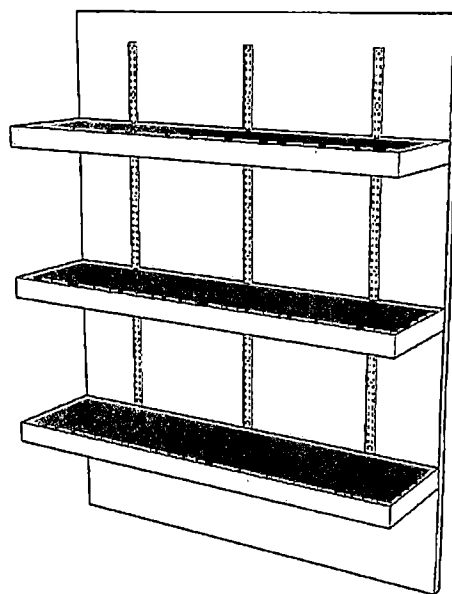


Figure D5
Short Wall Mounted
Retail 47"



*colors are approximate

Floor Mats

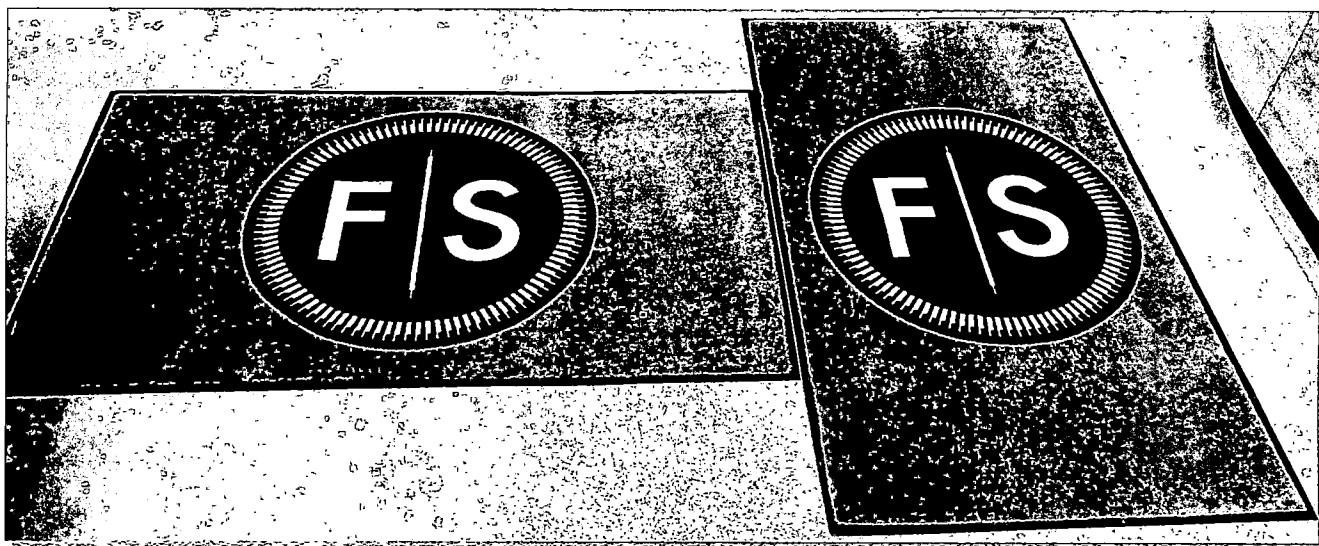
Two new floor mat designs are offered through Kaemark. These mats are durable weather mats that can help protect the entrance way of your salon. The mats are 30"x50" and offered in either vertical or horizontal design.

Figure M1

Horizontal Door Mat

Figure M2

Vertical Door Mat



Salon Lighting

Fantastic Sams® has negotiated special pricing with a single designated supplier for all salon lighting, including accent lighting to supplement the general lighting. The supplier is City Lighting Products Company. Using the lighting plan provided by Fantastic Sams®, City Lighting has created a list of approved lamps and bulbs. City Lighting will put together the appropriate lighting package for shipment based on the design that is to be used.

If a “vanilla box” is being provided by the landlord who will be installing the lighting, ask that the following ceiling light fixtures are provided:

- 2’x4’ recessed LED fixtures in the acoustic lay-in Ceiling 18 cell “parabolic” fixture

These fixtures produce much less glare than the typical flat plastic-lens fixtures that many landlords install.

When fluorescent lights are installed, request “natural light” lamps (bulbs) for the fixtures, such as the “T8” natural. These 2’x4’ fixtures, with a white parabolic lens, are available from City Lighting.

Accent Light for Restroom

We suggest installing an accent wall sconce light in the restrooms above the mirror, if possible. Typically, landlord supplied restrooms have a ceiling mounted fluorescent light, which creates unflattering shadows when a guest looks into the mirror. A decorative light above the mirror should be installed to provide ‘fill’ light on the face.

Salon Lighting

Main Salon Recessed Lighting

Type	Description	Manufacturer	Lamp
A	2' x 4' Recessed Fixture	METALUX	LED Lamp
D	6" Downlight Recessed	HALO	LED Lamp

Suspended Cloud Lighting

Type	Description	Manufacturer	Lamp
P1	6W Integral LED	ELAN	6W Integral LED
P2	Suspended Linear	AMERLUX	Linear Suspended LED
P3	Mini Pendant	ELAN	6W Integral LED 3200K

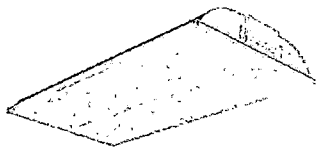
Retail Track Lighting

Type	Description	Manufacturer	Lamp
T	8ft Track Lighting	LOL	Ceiling Mount w/ Live Ends
T	4ft Track Lighting	LOL	Ceiling Mount w/ Live Ends
T1	Track Head	LOL	8.9 Integral LED
T	8ft Track Lighting	HALO	Ceiling Mount
T	Track Lighting Connectors + Live Ends	HALO	Connections + Live Ends
T2	Track Head	HALO	LED

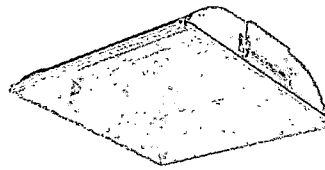
LED Tape for Station Retail Display

Type	Description	Manufacturer	Lamp
L1	3" Linear LED Tape	TPR	36" LED Cuttable Tape

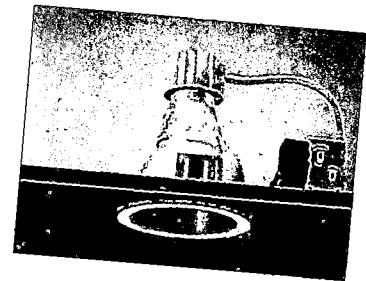
Ceiling Lighting Options



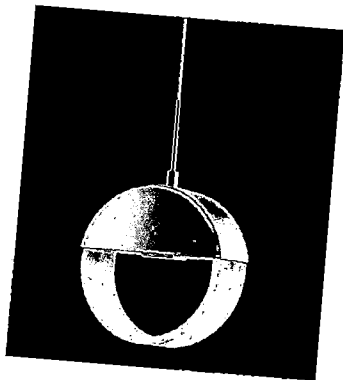
Type A 2'x4' Recessed Fixtures
Used in back support areas



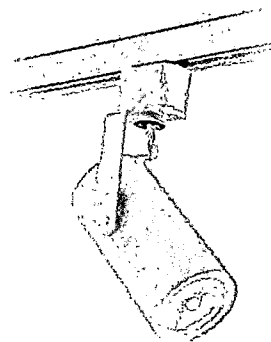
Type B 2'x2' Recessed Fixture
Used in back support areas



Type D1 Down Light w/ LED Lamp
Used in Main Salon Area



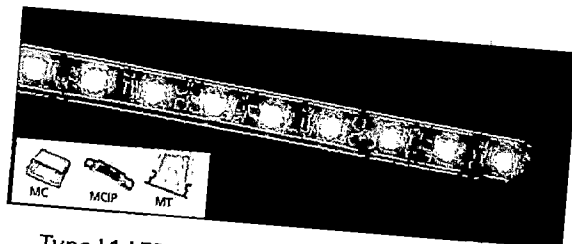
Type P1 Hanging Pendant Light
Above Color Bar/ Reception Desk



Type T Track Lighting
Ceiling Mounted Track Lighting



Type P3 Suspended Pendant Light
Hangs above Tall Base Station

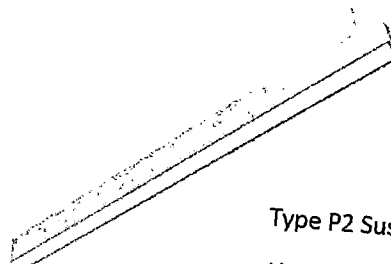


Type L1 LED Light Tape

*LED Lighted Tape for Styling Stations W/
Product Tower*



Type E Emergency Exit



Type P2 Suspended Linear LED (Black)
Light that will hang from Cloud

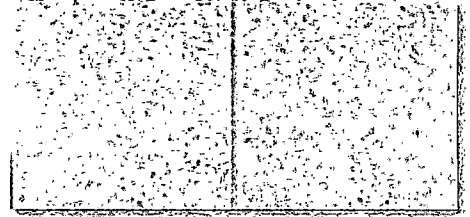
Ceilings

If you are provided with a “vanilla box” space, your landlord will provide:

- Ceiling with a height of 10’ to 11’
- Acoustic 2’ x 4’ lay-in ceiling, white in color
- T bar suspension system, white in color
- Ceiling tiles, white in color — black is not an approved ceiling color

If you have a choice of a ceiling tile system, request:

- Panels 2’ x 2’
- Armstrong “Cortega Second Look II”, white in color



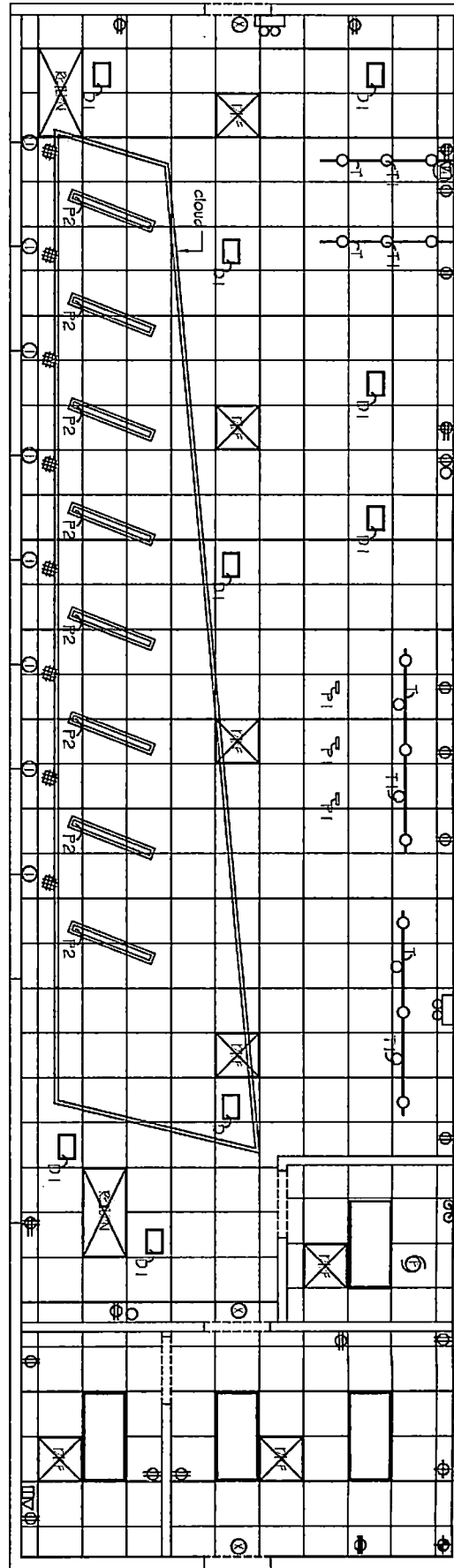
Do not paint over an existing grid and ceiling because this (i) may cause maintenance problems in the future and (ii) will reduce the sound absorption of the acoustic ceiling.

Black ceilings are not approved

Reflective Ceiling Plan

Note: This is a typical reflective ceiling plan for a 60' x 20' salon. Differently configured spaces will require alterations to this plan. All changes made must be approved by the FSFC Development Team.

Rear Exit



Front Entrance

Ceilings

Styling Area Cloud

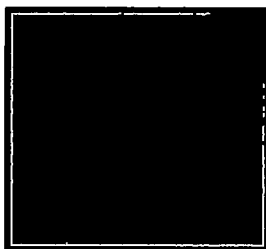
The Styling Area Cloud is a new design feature for Fantastic Sams®. It is optional for all new image salons.

The Cloud is a box suspended from the ceiling that mirrors the flooring transition from the front to the rear of the salon. It gives each salon a signature look. It can be painted either “Thunder Gray” or “Heartthrob Red”. All ceiling clouds are to be fabricated on site by the GC.

Sherman Williams “Thunder Gray” #SW7645

Sherwin Williams “Heartthrob” #SW6866

Cloud shown painted “Thunder
Grey



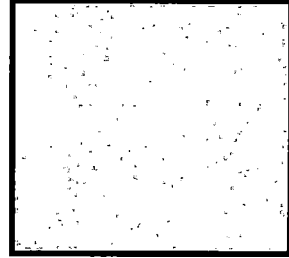
Paint and Wall Covering

The following paint colors have been selected for the interior walls. All paints are from Sherwin Williams. The company is a national paint manufacturer with very high quality paint. **DO NOT USE** any other brand of paint, as the color and quality vary from the original paint color and will not meet our standards. All walls should be primed, then painted with two coats of finish paint. Latex paints are suggested.

For interior walls:

Sherwin Williams "Ice Cube" #SW6252

This color is to be used as the primary wall color. The pale white color should be an "eggshell" finish. This color is easy to clean and will also help to hide imperfections in the wall surface.



Accent walls:

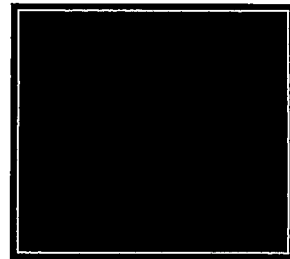
Sherwin Williams "Thunder Gray" #SW7645

This color can be used as an accent wall color. Use the "eggshell" finish.



Sherwin Williams "Heartthrob" #SW6866

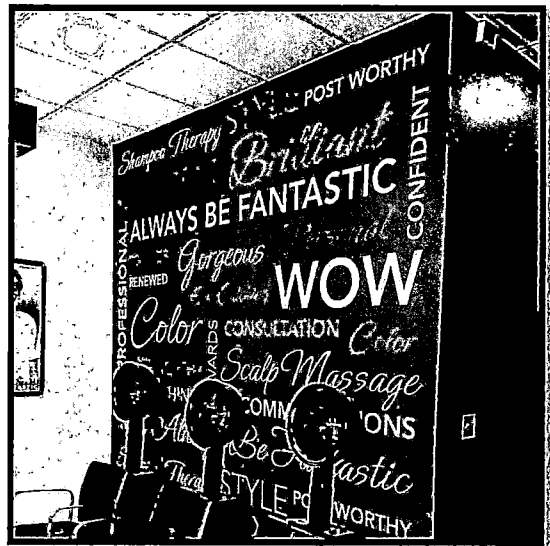
This color can be used as a second accent wall color. Use the "eggshell" finish.



*colors are approximate

Fantastic Sams Wow Wall Covering:

Wall covering is used to cover the back wall of the salon. It can be ordered from an approved vendor.



Flooring

Two flooring options have been designated to accent the new modern look of our salons; a grey stone finish and a hardwood finish option. Both tile finishes are offered in a ceramic tile or engineered wood flooring option. Our design team recommends the ceramic tile option over the engineered wood flooring. Of the two options, the ceramic tile is easier to clean and maintain and will show less wear over the life of the floor. Both the ceramic and engineered wood flooring options are shown below.

To order tiles please see Salon Design Manual Ordering Addendum for a list of the designated suppliers from which to choose.

Preferred Option/Option 1

- Daltile, Linden Point—Grigio LP21 (*Figure F1*)
- Daltile, Linden Point—Bianco LP19 (*Figure F2*)
- Daltile, Acacia Valley—Alder Av07 (*Figure F3*)

Grout Colors for Tile Options

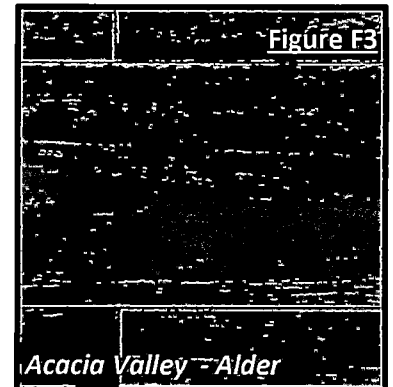
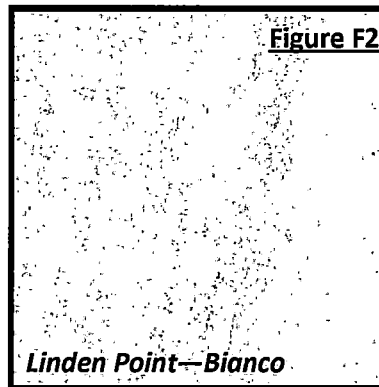
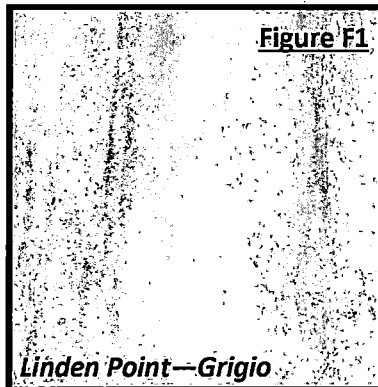
- Daltile # CN91—Laticrete Grout - Natural Grey #24 or equal
- Daltile #AV07—Laticrete Grout - Sand Beige #30 or equal

Secondary Option—

- NuCore, Driftwood (*Figure F4*)

Ceramic Tile Option

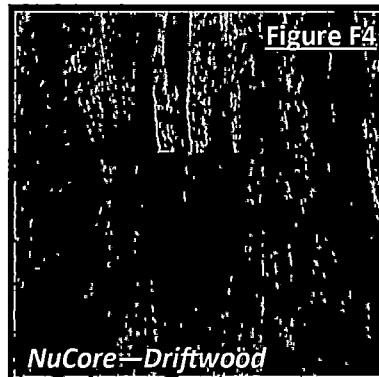
Daltile



*colors are approximate

Engineered Wood Flooring Option

NuCore



Salon Exterior Signage

All salons are required to display an exterior Fantastic Sams® logo sign in front of the site. The signs are to be LED lit. LED signs consume less energy and have a longer life.

Fantastic Sams® has worked with designated suppliers, who have created a collection of exterior signs from which to choose. All signage options will meet most requirements that a landlord may have. If not, custom measurements and orders can be created. Please see the complete list of approved supplies to contact the provider in your area located in the Design Manual Ordering Addendum.



Linear Logo Cabinet:

Fabricated Alum. Cabinet

Stencil Cut Face w/ Acrylic Graphics

Lit by White LED's

Mount Flush to Facade



Note: Salon Signs may be designed and lit differently based on the landlord's requirements.

Stacked Logo Cabinet:

Fabricated Alum. Cabinet

Stencil Cut Face w/ Acrylic Graphics

Lit by White LED's

Mount Flush to Facade

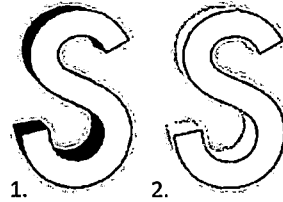
*colors are approximate

Salon Exterior Signage

Channel letters come in multiple colors to accommodate the restrictions or requirements in place. The preferred exterior signage letters should be white, with white returns. In the event that a landlord requires dark or black signs the second option with black letter face can be used.

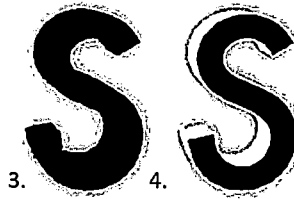
Standard/Preferred Color Options:

1. White Face/ Black Trim Black Returns
2. White Face / White Trim White Returns



Secondary Color Option if needed

3. Black Face / Black Trim Black Returns
4. Black Face / Black Trim White Returns



Linear Logo Channel Letters (Standard Colors):

Fabricated Alum. Channel letters w/ 5" returns

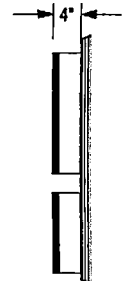
Acrylic Face w/ Trim Cap

Lit by White LED's

Mount Flush to Facade

FANTASTIC SAM'S®
CUT & COLOR

FRONT VIEW
SCALE: 3/4"=1"



SIDE VIEW
SCALE: 3/4"=1"

Linear Channel Letters (Option B)

Fabricated Alum. Channel Letters w/ 5" Returns

Acrylic Face w/ Trim Cap

Lit by White LED's

Mount Flush to Facade

FANTASTIC SAM'S®
CUT & COLOR

FRONT VIEW



SIDE VIEW

*colors are approximate

Pylon Signage

The Pylon signs are vivid and are available in either black or white to match the salon's exterior signage. There are four pylon sign sizes, designed meet any landlord restrictions. If one of the options below does not fit or meet the requirements of the center, a special sign can be created with approval from the FSFC Development Team.

Linear Pylon Signs

.25" Trans White Lexan Panels

Black & White Graphics

Mounted to Existing Pylon

FANTASTIC SAMS[®]
CUT & COLOR

FANTASTIC SAMS[®]
CUT & COLOR

**FANTASTIC
SAMS[®]**
CUT & COLOR

**FANTASTIC
SAMS[®]**
CUT & COLOR

Stacked Pylon Signs

.25" Trans White Lexan Panels

Black & White Graphics

Mounted to Existing Pylon



Example of pylon sign

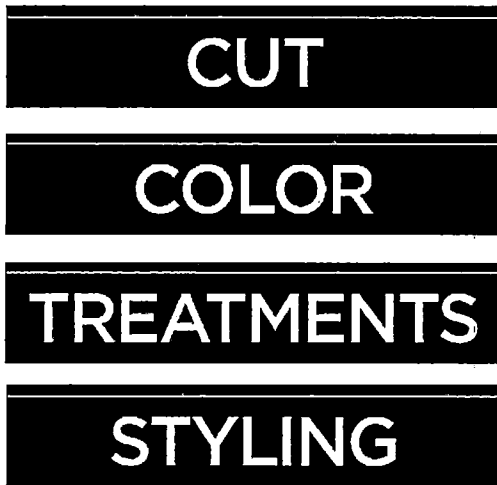
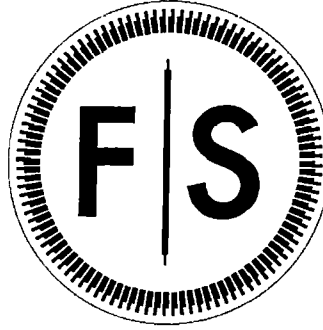
*colors are approximate

Additional Signage and Branding

FS Window Graphics and Decals

FS Logo Decal

This is a decal that can be printed on any material or as a window graphic



Front Window Vinyl Graphics

Vinyl window graphics are available for additional salon branding. All window graphics are created with color injection to resist fading.

Hours of Operation Decal

The hours of operation window decal comes in white and is placed on the entrance door.



FANTASTIC SAM'S

CUT & COLOR

MONDAY - FRIDAY

9:00 am - 8:00 pm

SATURDAY

9:00 am - 7:00 pm

SUNDAY

9:00 am - 5:00 pm

P: 708-771-4650

INDEPENDENTLY OWNED AND OPERATED

*colors are approximate

Additional Signage and Branding

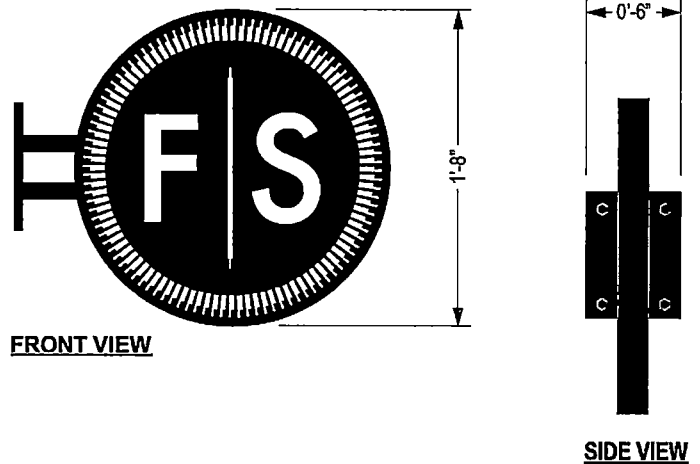
Non-Illuminated Blade Sign:

This sign hangs perpendicular from an exterior wall if a larger sign is not available

2" Thick Sintra Blade Sign

White Vinyl Text and Ring

Mount w/ Alum. Bracket and Mounting Plate



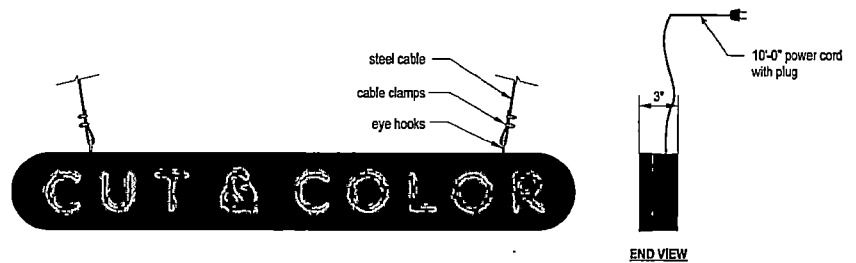
Cut & Color Window Pill

Fabricated channel sign

Internally lit with Red LED

Red Graphics

Suspended from ceiling with steel cables



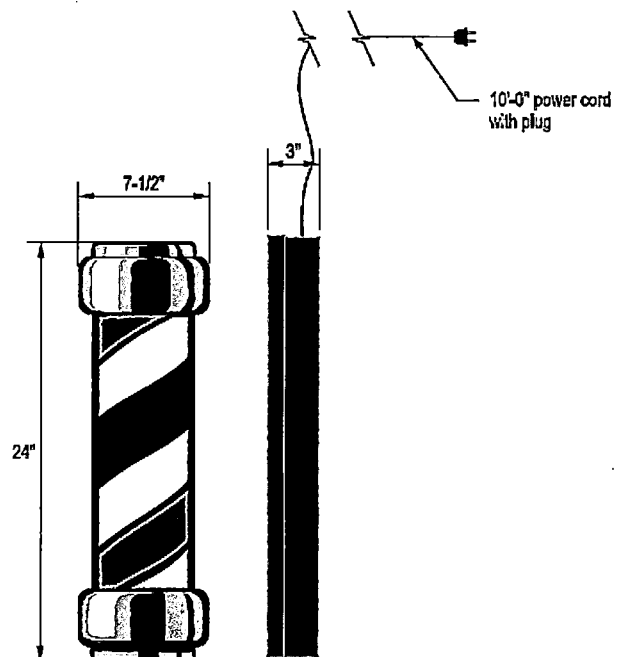
Barber Pole Window Sign

Fabricated channel sign

Internally lit White LED

Red, White and Blue Graphics

Suspended from ceiling with steel cables



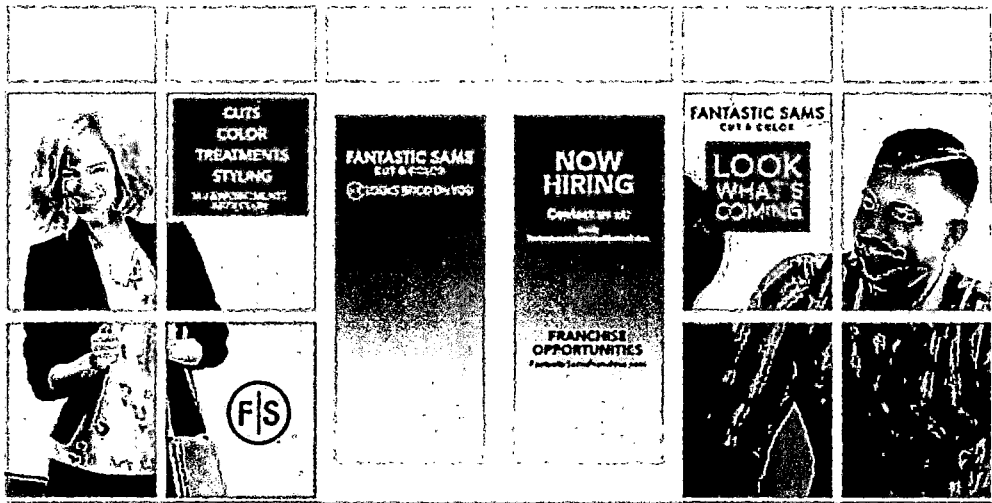
Window Wrap

The window wrap is an essential jumpstart to the marketing campaign for your salon's grand opening. It is adhered to front facing windows during construction and acts as a covering and informative billboard to let anyone who drives by know a new Fantastic Sams® salon will open soon.

Measurements of the front window are taken to assure the best fit prior to placing an order. Production time is 6 working days from artwork approval. Final approval will be made with owner and the FSFC Development Team for brand compliance prior to production.

Product information: The window wrap is lightweight and printed on matte text-panels. It adheres to the window with double-sided tape (provided). The installation can be completed by owner/employees, contractors or a sign installer before the construction process begins.

Window Wrap Front Panel Image:



Optional "Now Open" Panel:



Digital Services Menu and Display Units

Digital menu display marketing signage is a required Fantastic Sams® standard. The digital display units should be designed to provide clear, long lasting, durable service life from the equipment at the best possible price.

Fantastic Sam's requires three distinct sized commercial grade TV options; a 32" screen, a 40" screen and a 48" screen. The recommended brand for use is a Samsung commercial monitor built with a stronger display chassis to protect it from bumps and accidents. Most are available at local retailers and can be purchased with an optional replacement warranty.

The TV's should be commercial quality and designed to run between 16 and 24 hours a day. They have a wider variety of input connections, allowing maximum flexibility to connect easily to the internet and your computer. These TVs are used to display the menu of services offered at the salon, along with special seasonal promotions, product images, video and the newest display images from the marketing team. Any technical support or assistance may be available through the local retailer as part of their extended warranty program.

Television Sizes and Options:

Samsung 32" Commercial Monitor

Dimensions: 28.4" x 16.5" x 2"

Location in Salon: Color Bar Area – Displays
TIGI Color Video



Samsung 40" Commercial Monitor

Dimensions: 42.3" x 24.4" x 2"

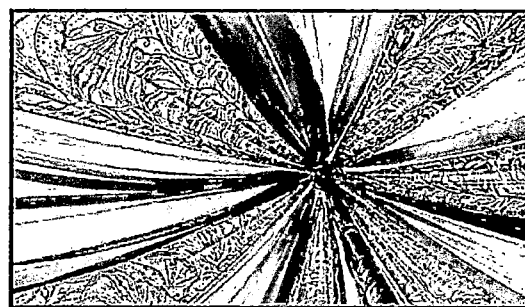
Location in Salon: Cash Stand Area – Displays
Services Menu, Daily Specials and Product
Promotion images.



Samsung 48" Commercial Monitor

Dimensions: 46.7" x 28.1" x 5.8"

Location in Salon: 3rd additional TV in rear –
Displays Model Images and Service Promotion
images.



Peerless Tilting Wall Mount

Dimensions: 20.82" x 16.88" x 2.66-5.31"

Weight: 5.5 lbs.

Standard VESA mounting pattern

Point of Sale System

The Point of Sale System “POS” is an important tool for operating an effective and profitable salon. The POS is used to efficiently track, manage, and grow a Fantastic Sams® salon. A POS from one of our approved suppliers must be installed prior to opening. This will allow staff to be trained and become comfortable with the POS.

The POS software will capture the most important salon data, including discount redemptions, employee schedules and timecards, inventory and guest information. Each software system is internet-enabled, allowing for remote access.

Each POS system includes the following features:

- **Point of Sale**— Check guests in and out while capturing information for their next visit. Track waiting and service times, redeem coupons, sell products and services, tender payments.
- **Employee Time Clock**— Check employees in and out, track lunches and breaks, provide employee-to-employee messaging.
- **Employee Scheduling & Payroll**— Schedule employees for shifts, calculate gross wages based on hourly and commission pay scales.
- **Open & Close Salon Reconciliation**— Count cash before salon opens, reconcile cash, checks, credit, gift cards, pay outs at the end of the day.
- **Inventory Maintenance**—Count inventory, adjust product quantity for back bar use, create purchase orders, manage your level of product investment.
- **Guest Marketing**—Manage guest information, merge duplicate guests, add guest “up-sells”, generate lists of guests who meet certain criteria for analysis and marketing.
- **Forms Management** — Provide digital access to documents that can be printed as needed, including employment forms and personnel manuals.
- **Reporting & Analytics**— Generate reports across each area of your business; schedule reports to be delivered by email.

The POS provider will also deliver end-to-end technical support, including remote software installation, staff training, and assistance when you have problems. Ongoing development of new features for Fantastic Sams® helps ensure your POS keeps up with the latest trends and the current Fantastic Sams® campaigns to help you make the most of your business.

See the Design Manual Addendum for designated POS suppliers.



Payment Processor

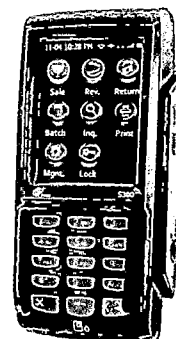
You will need to order a payment processor or a credit card machine to work with your POS system. Fantastic Sams® has two designated suppliers; Electronic Payment Exchange (EPX) and Total System Services (TSYS).

Both companies offer competitive rates and will help keep the cost of credit card transactions down. EPX and TSYS are both PCI and EMV compliant and can integrate with both POS systems or work as a stand alone device.



Electronic Payment Exchange (EPX) - EPX accepts all forms of payment including MSR, EMV, contactless and mobile NFC. Meets the latest PCI PTS v3.0 security standards. The terminal also integrates with Guest Vision and can work as a stand alone system for Super Salon users. A receipt printer is built in to the terminal.

Total System Services (TSYS) - TSYS uses a PAX S300 terminal and integrates directly with Super Salon POS Systems. TSYS accepts the latest payments including EMV cards and digital wallets such as Apple Pay and Samsung Pay. Using TSYS adds point-to-point encryption to help protect customer card data and may reduce your PCI compliance scope. A TYSY purchase includes 24/7 customer assistance.



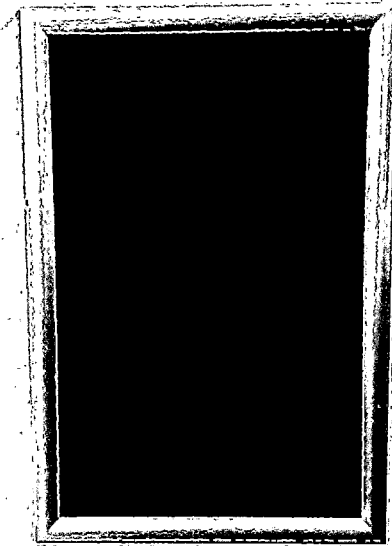
Snap Frames and Advertising

Snap Frames: Are a used in the salon to display the newest model images and posters throughout the salon. These new Snap Frames have a clean chrome finish and can be ordered from The Bernard Group (print.fantasticsams.com). At least two frames are needed to be ordered for each salon, check with the marketing team to know how many frames are needed for the salon.

Snap Frames:

Size Graphic: 23.375" X 35.25"

- **Vendor:** The Bernard Group (print.fantasticsams.com)
- **Price:** \$54.00 each



Restrooms

In many cases, the landlord will already have constructed the restrooms. In these instances, slight modifications can be made to the existing restroom to enhance the image. We suggest the following:

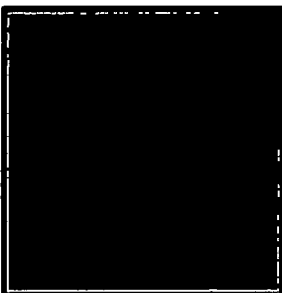
- Paint the wall behind the toilet and sink as well as the wall to the side of the toilet in the accent paint color. Thunder Gray SW7645 (*see the painting section*)
- Consider changing the light if the existing light is inadequate.

If the landlord permits changes to the design of the restroom before it is constructed, consider the following suggestions:

- Paint the wall behind the toilet, sink, and the wall to the side of the toilet in the accent paint color. Thunder Grey SW7645 (*see the painting section*)
- Wet Wall Tile Option—Acacia Valley-Alder with dark grout shall be installed on the walls to 48" AFF
- Flooring—Linden Point Grigio
- In addition to a ceiling mounted light and exhaust fan, install a light above the mirror (*see lighting section*).
- Use an ADA approved toilet with an open front seat (required by most codes).
- Use an ADA approved sink, but do NOT use the extended “wheelchair” sink that is sometimes recommended by plumbers. This sink takes up extra space and is difficult for most wheelchair users to use, since sleeves drag in the extended sink. The manufacturer’s printed material will tell you if the sink complies with ADA. Remember to have your contractor provide “pipe wrap” for the pipes under the sink to comply with the ADA requirements.
- Consider upgrading to commercial toilet paper dispensers and waste cans because they will last much longer. Consider a semi-recessed paper towel dispenser and trash disposal. This type of unit is built into the wall, saves space and looks neater. These are available from manufacturers such as “Bobrick” (if you do not install this type of unit, remember to provide a closed receptacle for sanitary products disposal.)

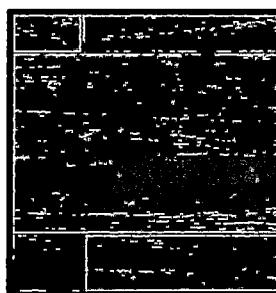
Paint:

Thunder Grey-SW7645



Wall Tile:

Acacia Valley - Alder



Floor Tile:

Linden Point—Grigio



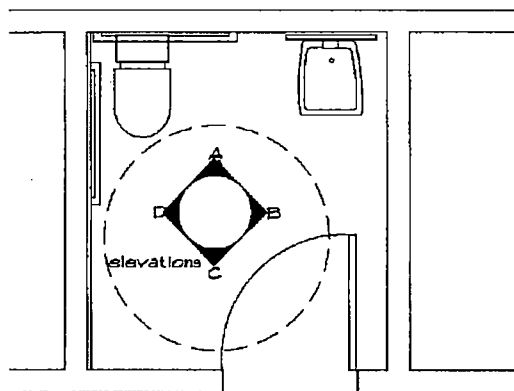
Restrooms

All newly constructed or physically altered restrooms must comply with the Americans with Disabilities Act (ADA) and must accommodate a wheelchair user. Some jurisdictions require restrooms to be upgraded when a new tenant occupies the space. We suggest that the architect contact the local building official if an existing restroom is being used.

Be aware that once constructed, access to an ADA restroom cannot be blocked by adding coat racks, cabinets, storage units or other items. The ADA is a federal law, not just a local building code.

The architect should also verify the number of restrooms required within the local jurisdiction. These requirements vary from county to county, or from state to state. In most cases, only one restroom will be required, but this could vary based on the interpretation of the local building official and the local code requirements, in addition to the salon's design.

Some jurisdictions require additional items, such as urinals in men's rooms or electric water coolers. We suggest that the architect review these requirements with your local building official.



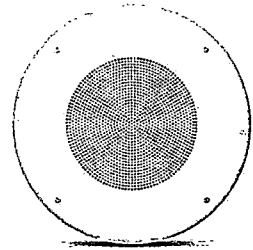
Typical ADA Restroom

Sound System

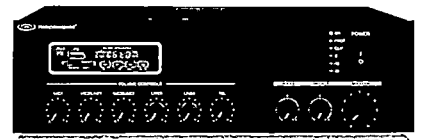
A sound system can be installed to play music to make the salon experience more enjoyable. Fantastic Sams does not have an approved national vendor for sound systems, one can be purchased and installed through a local supplier using our recommended specifications. Please keep in mind that salon sizes vary and larger salons may require additional speakers to allow for a uniform sound throughout the salon. It is important to only use commercial grade products that are designed for extended every day usage, these products will last longer and sound better than ordinary systems.

Recommendations below are for a standard 1,200 sqft salon space.

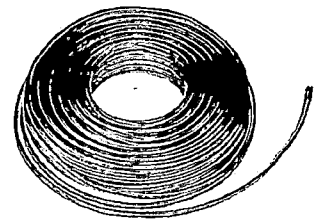
Speakers: 8 8in 70-volt Commercial in-ceiling speaker is standard for retail use. These speakers are able to provide a clear crisp sound throughout a space.



Amplifier: 70/100V 7 Channel Commercial Amplifier. A 70V amp has is the best fit for the type of system used in a retail space it can power the speakers needed and any additional speaker added in the future.



Wire: Commercial grade wire should be used 14 gauge or larger.



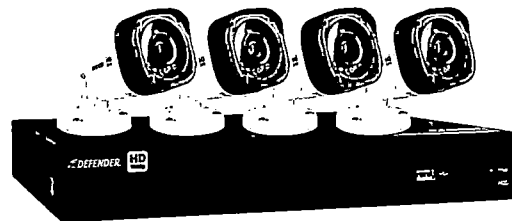
Security System

A security system should be installed to make the salon is a safe place to work. The system should consist of cameras covering all important areas of the salon, and a recording device located either in the salon or offsite. For easy installation Fantastic Sams recommends using wireless cameras with motion activated recording that save to a large storage hard drive.

Some counties or property ownership require offsite monitoring security systems, in these cases ADT is Fantastic Sam's approved vendor. ADT provides a full range of products and services to help franchisees monitor the salon as well as provide assistance if there is ever an emergency situation.

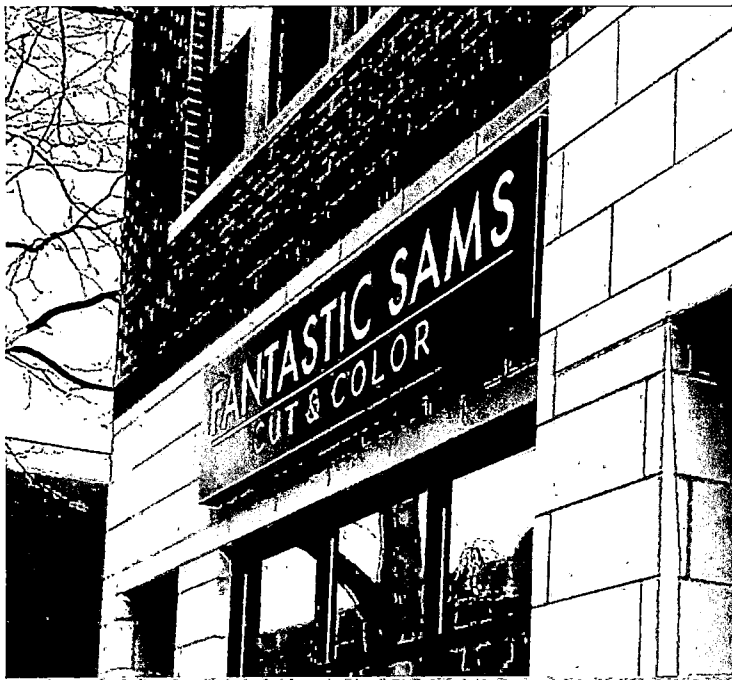
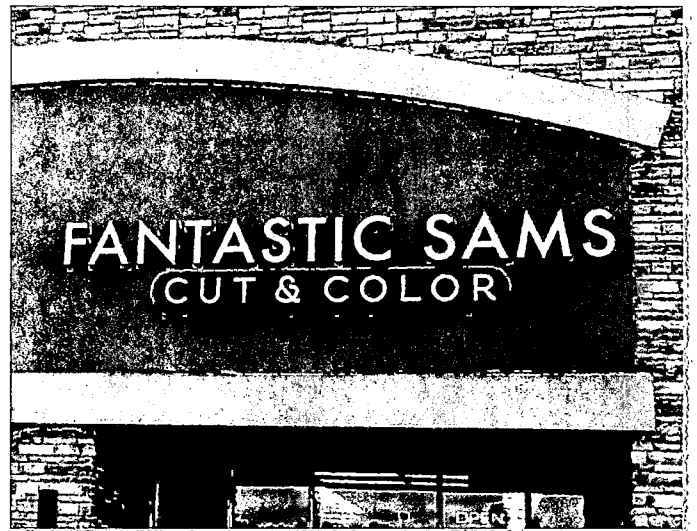
Minimum Security Standards:

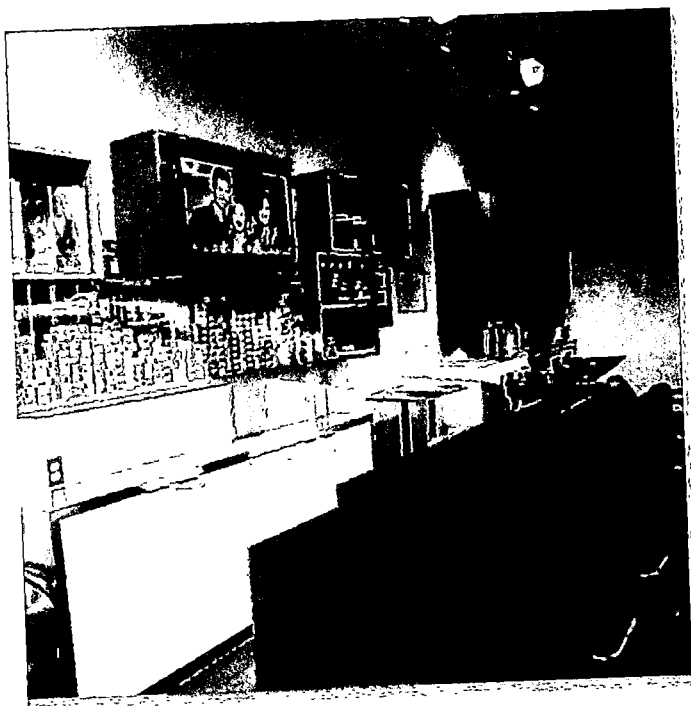
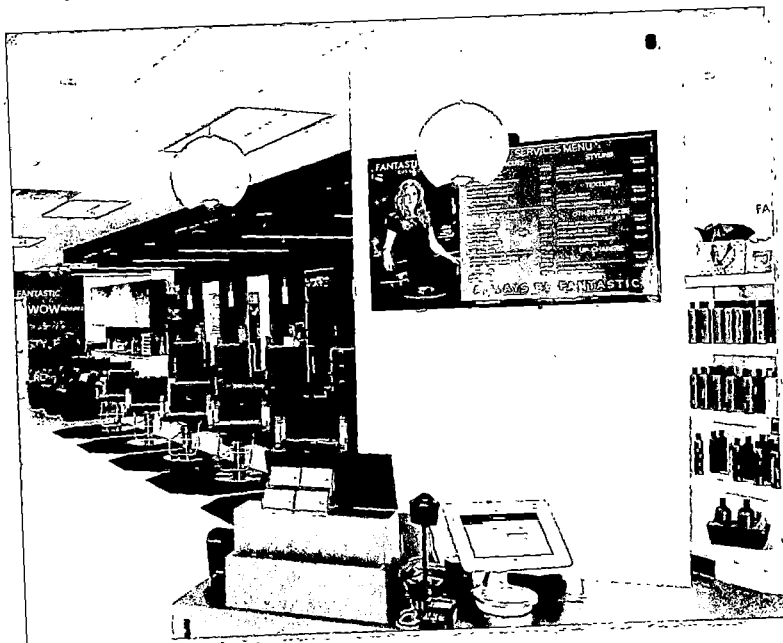
- 4 Cameras
- 1TB Hard Drive
- Optional DVR Playback
- Remote control
- Window Warning Sticker



Offsite Monitoring: Contact your regional office for more information on the ADT system and security options.

Salon Photos





State Of New Jersey
New Jersey Office of the Attorney General
Division of Consumer Affairs

THIS IS TO CERTIFY THAT THE
Fire Alarm, Burglar Alarm & Locksmith Adv Comm

HAS REGISTERED

AFA PROTECTIVE SYSTEMS INC
Aniello Montuori
961 Joyce Kilmer Ave
North Brunswick NJ 08902

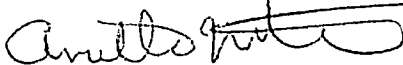
FOR PRACTICE IN NEW JERSEY AS A(N): BA and FA Business

01/18/2017 TO 01/31/2020

VALID

34BF00010600

LICENSE/REGISTRATION/CERTIFICATION #



Signature of Licensee/Registrant/Certificate Holder



DIRECTOR

New Jersey Office of the Attorney General
Division of Consumer Affairs
THIS IS TO CERTIFY THAT THE
Fire Alarm, Burglar Alarm & Locksmith Adv Comm
HAS REGISTERED
AFA PROTECTIVE SYSTEMS INC
BA and FA Business

01/18/2017 TO 01/31/2020

VALID

34BF00010600

LICENSE/REGISTRATION/CERTIFICATION #

SIGNATURE



DIRECTOR

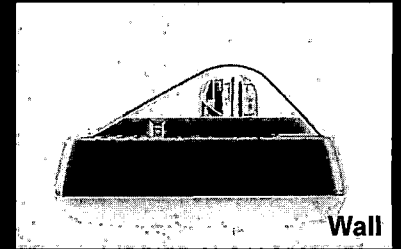
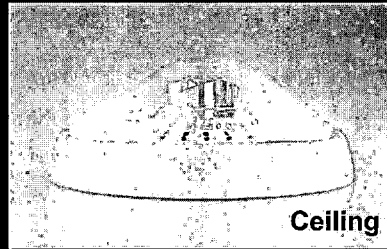
PLEASE DETACH HERE
IF YOUR LICENSE/REGISTRATION/
CERTIFICATE ID CARD IS LOST
PLEASE NOTIFY:

Fire Alarm, Burglar Alarm & Locksmith
P.O. Box 45006
Newark, NJ 07101

PLEASE DETACH HERE



Strobe, Horn Strobe, and Horn Notification Appliances



Description:

The Wheelock® Exceder™ Series of notification appliances feature a sleek modern design that will please building owners with reduced total cost of ownership. Installers will benefit from its comprehensive feature list, including the most candela options in one appliance, low current draw, no tools needed for setting changes, voltage test points, 12/24 VDC operation, universal mounting base and multiple mounting options for both new and retrofit construction.

The Wheelock® Exceder™ Series incorporates high reliability and high efficiency optics to minimize current draw allowing for a greater number of appliances on the notification appliance circuit. All strobe models feature an industry first of 8 candela settings on a single appliance. Models with an audible feature 3 sound settings (90, 95, 99 dB). All switches to change settings, can be set without the use of a tool and are located behind the appliance to prevent tampering. Wall models feature voltage test points to take readings with a voltage meter for troubleshooting and AHJ inspection.

The Wheelock® Exceder™ Series of wall and ceiling notification appliances feature a Universal Mounting Base (UMB) designed to simplify the installation and testing of horns, strobes, and combination horn strobes. The separate universal mounting base can be pre-wired to allow full testing of circuit wiring before the appliance is installed and the surface is finished. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues. The Contact Cover is polarized to prevent it from being installed incorrectly and prevents the appliance from being installed while it is on the UMB. When the Contact Cover is removed the circuit will show an open until the appliance is installed. The UMB allows for consistent installation and easy replacement of appliances if required. Wall models provide an optional locking screw for extra secure installation, while the ceiling models provide a captivated screw to prevent the screw from falling during installation.

- Save up to **48%** in current draw*
- Up to **9** models now in **1** appliance
- Save up to **14%** cost of installation**



Sleek Modern Aesthetics



Finger Slide Switches



Voltage Test Points



Multiple Voltages



3 Audible Settings
90, 95, 99 dB



8 Candela Settings ***
Wall - 15/1575/30/75/95/110/135/185
Ceiling - 15/30/60/75/95/115/150/177



Universal Mounting Base ***
Ceiling and Wall
Mounts to 5 Backbox Types



Environmentally Friendly
Low Current Draw

Compatibility and Requirements

- Synchronize using the Wheelock® Sync Modules or panels with built-in Wheelock® Patented Sync Protocol
- Compatible with UL "Regulated Voltage" using filtered VDC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range

* Compared to competitive models

*** Patented

** Compared to previous models

NOTE: All CAUTIONS and WARNINGS are identified by the symbol . All warnings are printed in bold capital letters.

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER NOTIFICATION FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

General Notes:

General Notes:

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series Exceder Strobe products are Listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%) UL 464 (85% UL 1971).
- Series Exceder horns are under UL Standard 464 for audible signal appliances (Indoor use only).

Low Current Draw = Fewer Power Supplies

Strobe Ratings per UL Standard 1971

		UL Max Current*													
		24 VDC / 24 FWR												12 VDC	
Model	Regulated Voltage Range VDC	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
ST	8.0-33.0	0.057	0.070	0.085		0.135	0.163	0.182		0.205			0.253	0.110	0.140
STC	8.0-33.0	0.061		0.085	0.103	0.135	0.163		0.182		0.205	0.253		0.110	

Horn Strobe Ratings per UL 1971 & Anechoic at 24 VDC

		UL Max Current* at Anechoic 99 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.082	0.095	0.102		0.148	0.176	0.197		0.242			0.282	0.125	0.159
HSC	8.0-33.0	0.082		0.102	0.141	0.148	0.176		0.197		0.242	0.282		0.125	

		UL Max Current* at Anechoic 95 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
Model	Regulated Voltage Range VDC														
HS	8.0-33.0	0.073	0.083	0.087		0.139	0.163	0.186		0.230			0.272	0.122	0.153
HSC	8.0-33.0	0.073		0.087	0.128	0.139	0.163		0.186		0.230	0.272		0.122	

		UL Max Current* at Anechoic 90 dBA													
		24 VDC												12 VDC	
Model	Regulated Voltage Range VDC	15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084		0.136	0.157	0.184		0.226			0.267	0.120	0.148
HSC	8.0-33.0	0.065		0.084	0.120	0.136	0.157		0.184		0.226	0.267		0.120	

Horn Ratings per UL Anechoic

Model	Regulated Voltage Range VDC	99 dBA	95 dBA	90 dBA
HN	16-33.0	0.064	0.044	0.022
HNC	16-33.0	0.084	0.044	0.022
HN	8.0-17.5	0.047	0.026	0.017
HNC	8.0-17.5	0.047	0.026	0.017



* UL max current rating is the maximum RMS current within the listed voltage range (16-33 VDC for 24 VDC units). For strobes the UL max current is usually at the minimum listed voltage (16 VDC for 24 VDC units). For audibles the max current is usually at the maximum listed voltage (33 VDC for 24 VDC units). For unfiltered ratings, see installation instructions.

Specification & Ordering Information

Model	Strobe Candela	Sync w/ DSM or Wheelock Power Supplies	12/24 VDC*	Mounting Options
Horn Strobes				
HSR	15/1575/30/75/95/110/135/185	X	X	UMB**
HSW	15/1575/30/75/95/110/135/185	X	X	UMB**
HSRC	15/30/60/75/95/115/150/177	X	X	UMB**
HSWC	15/30/60/75/95/115/150/177	X	X	UMB**
Strobes				
STR	15/1575/30/75/95/110/135/185	X	X	UMB**
STW	15/1575/30/75/95/110/135/185	X	X	UMB**
STRC	15/30/60/75/95/115/150/177	X	X	UMB**
STWC	15/30/60/75/95/115/150/177	X	X	UMB**
Horn				
HNR		X	X	UMB**
HNW		X	X	UMB**
HNRC		X	X	UMB**
HNWC		X	X	UMB**

*12 VDC models feature 15 & 15/75 settings

**UMB = Universal Mounting Base

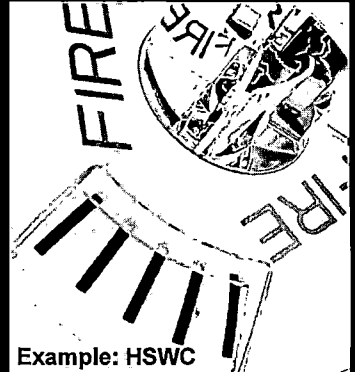
Model Legend

HN = Horn
 ST = Strobe
 HS = Horn Strobe
 C = Ceiling Mount
 W = White
 R = Red
 A = Agent Lettering (Strobes only)
 AL = Alert Lettering (Strobes only)
 N = No Lettering (Strobes only)

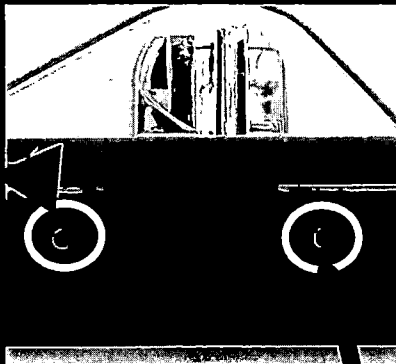
Example 1: STRC = Strobe, Red, Ceiling Mount
 Example 2: HSR = Horn Strobe, Red, Wall Mount
 Example 3: HSW = Horn Strobe, White, Wall Mount
 Example 4: STW-AL = Strobe, White, Wall Mount, Alert Lettering



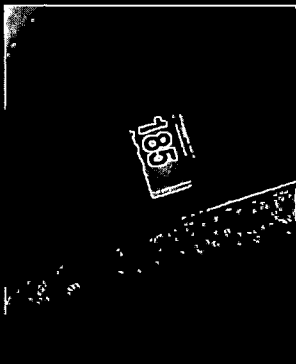
Example.



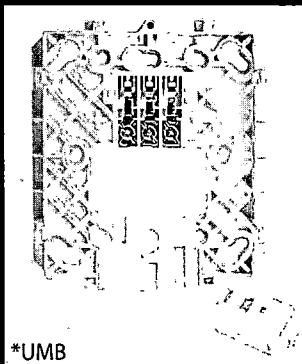
Example: HSWC



Voltage test points for quick troubleshooting and easy spot checking (wall models only)

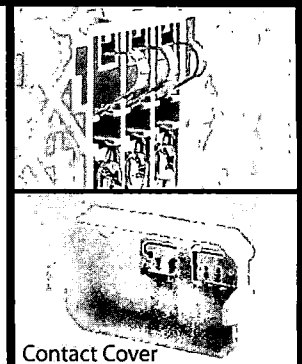


8 candela settings



*UMB

Common base for wall and ceiling with 5 mounting options



Contact Cover

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Cooper Notification standard terms and conditions.

Architects and Engineers Specifications

The notification appliances shall be Wheelock® Exceder™ Series HS Audible Strobe appliances, Series ST Visual Strobe appliances and Series HN Audible appliances or approved equals. The Series HS and ST Strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The Series HS and HN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All Series shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP) with the ability to operate from 8 to 33 VDC. Indoor wall models shall incorporate voltage test points for easy voltage inspection.

The Series HS Audible Strobe and ST Strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The Series shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have 8 field selectable settings at 15, 15/75, 30, 75, 95, 110, 135, 185 candela for wall mount and 15, 30, 60, 75, 95, 115, 150, 177 candela for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 15/75 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required (e.g. ADA compliance). Appliances with candela settings shall show the candela selection in a visible location at all times when installed.

The audible shall have a minimum of three (3) field selectable settings for dBA levels and shall have a choice of continuous or temporal (Code 3) audible outputs.

The Series HS Audible Strobe, ST Strobe and Series HN Audible shall incorporate a patented Universal Mounting Base that shall allow mounting to a single-gang, double-gang, 4-inch square, 3.5-inch octal, 4-inch octal or 100mm European type back boxes. Two wire appliance wiring shall be capable of directly connecting to the mounting base. Continuity checking of the entire NAC circuit prior to attaching any notification appliances shall be allowed. Product shall come with Contact Cover to protect contact springs. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). The mounting base shall be the same base among all horn, strobe, horn strobe, wall and ceiling models. All notification appliances shall be backwards compatible.

The Series HS and ST wall models shall have a low profile measuring 5.24" H x 4.58" W x 2.19" D. Series HN wall shall measure 5.24" H x 4.58" W x 1.6" D. The Series HSC and STC shall be round and have a low profile with a diameter of 6.68" x 2.63" D. Series HNC ceiling shall have a diameter of 6.68" x 1.50" D.

When synchronization is required, the appliance shall be compatible with Wheelock®'s DSM Sync Modules, Wheelock® Power Supplies or other manufacturer's panels with built-in Wheelock® Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync protocol fails to operate, the strobe shall revert to a non-synchronized flash-rate and still maintain (1) flash per second over its Regulated Voltage Range. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation when used with Wheelock® synchronization protocol.

Wall Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM

Ceiling Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM



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3 YEAR WARRANTY

Exceder - Spec Sheet 6/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

Cooper Notification is

Wheelock®

(MEDC)

SAFEPATH®

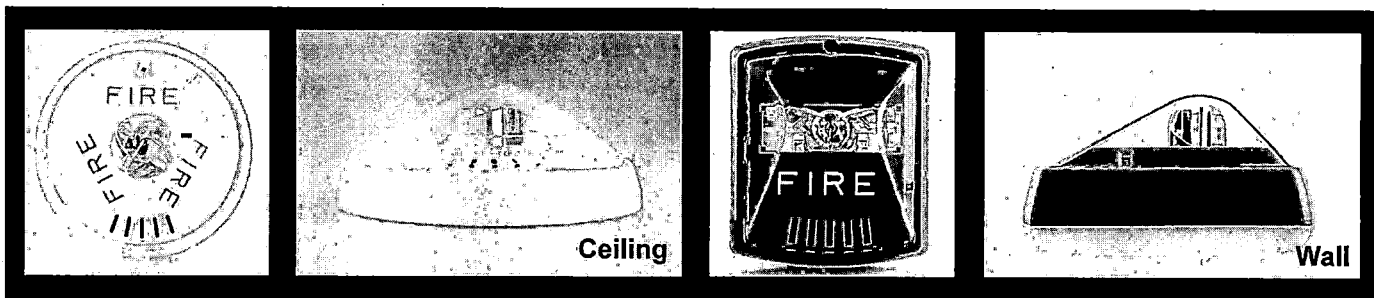
WAVES



COOPER Notification



Strobe, Horn Strobe, and Horn Notification Appliances



Description:

The Wheelock® Exceder™ Series of notification appliances feature a sleek modern design that will please building owners with reduced total cost of ownership. Installers will benefit from its comprehensive feature list, including the most candela options in one appliance, low current draw, no tools needed for setting changes, voltage test points, 12/24 VDC operation, universal mounting base and multiple mounting options for both new and retrofit construction.

The Wheelock® Exceder™ Series incorporates high reliability and high efficiency optics to minimize current draw allowing for a greater number of appliances on the notification appliance circuit. All strobe models feature an industry first of 8 candela settings on a single appliance. Models with an audible feature 3 sound settings (90, 95, 99 dB). All switches to change settings, can be set without the use of a tool and are located behind the appliance to prevent tampering. Wall models feature voltage test points to take readings with a voltage meter for troubleshooting and AHJ inspection.

The Wheelock® Exceder™ Series of wall and ceiling notification appliances feature a Universal Mounting Base (UMB) designed to simplify the installation and testing of horns, strobes, and combination horn strobes. The separate universal mounting base can be pre-wired to allow full testing of circuit wiring before the appliance is installed and the surface is finished. It comes complete with a Contact Cover for protection against dirt, dust, paint and damage to the contacts. The Contact Cover also acts as a shunting device to allow pre-wire testing for common wiring issues. The Contact Cover is polarized to prevent it from being installed incorrectly and prevents the appliance from being installed while it is on the UMB. When the Contact Cover is removed the circuit will show an open until the appliance is installed. The UMB allows for consistent installation and easy replacement of appliances if required. Wall models provide an optional locking screw for extra secure installation, while the ceiling models provide a captivated screw to prevent the screw from falling during installation.

- Save up to **48%** in current draw*
- Up to **9** models now in **1** appliance
- Save up to **14%** cost of installation**

- Sleek Modern Aesthetics**
- Finger Slide Switches**
- Voltage Test Points**
- Multiple Voltages**
- 3 Audible Settings**
90, 95, 99 dB
- 8 Candela Settings** ***
Wall - 15/1575/30/75/95/110/135/185
Ceiling - 15/30/60/75/95/115/150/177
- Universal Mounting Base** ***
Ceiling and Wall
Mounts to 5 Backbox Types
- Environmentally Friendly**
Low Current Draw

Compatibility and Requirements

- Synchronize using the Wheelock® Sync Modules or panels with built-in Wheelock® Patented Sync Protocol
- Compatible with UL "Regulated Voltage" using filtered VDC or unfiltered VRMS input voltage
- Strobes produce 1 flash per second over the "Regulated Voltage" range

* Compared to competitive models

*** Patented

** Compared to previous models

NOTE: All CAUTIONS and WARNINGS are identified by the symbol . All warnings are printed in bold capital letters.

WARNING: PLEASE READ THESE SPECIFICATIONS AND ASSOCIATED INSTALLATION INSTRUCTIONS CAREFULLY BEFORE USING, SPECIFYING OR APPLYING THIS PRODUCT. VISIT WWW.COOPERNOTIFICATION.COM OR CONTACT COOPER NOTIFICATION FOR THE CURRENT INSTALLATION INSTRUCTIONS. FAILURE TO COMPLY WITH ANY OF THESE INSTRUCTIONS, CAUTIONS OR WARNINGS COULD RESULT IN IMPROPER APPLICATION, INSTALLATION AND/OR OPERATION OF THESE PRODUCTS IN AN EMERGENCY SITUATION, WHICH COULD RESULT IN PROPERTY DAMAGE, AND SERIOUS INJURY OR DEATH TO YOU AND/OR OTHERS.

General Notes:

General Notes:

- Strobes are designed to flash at 1 flash per second minimum over their "Regulated Voltage Range".
- All candela ratings represent minimum effective strobe intensity based on UL Standard 1971.
- Series Exceder Strobe products are Listed under UL Standards 1971 and 464 for indoor use with a temperature range of 32°F to 120°F (0°C to 49°C) and maximum humidity of 93% (± 2%) UL 464 (85% UL 1971).
- Series Exceder horns are under UL Standard 464 for audible signal appliances (Indoor use only).

Low Current Draw = Fewer Power Supplies

Strobe Ratings per UL Standard 1971

Model		UL Max Current*													
		24 VDC / 24 FWR												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
ST	8.0-33.0	0.057	0.070	0.085		0.135	0.163	0.182		0.205			0.253	0.110	0.140
STC	8.0-33.0	0.061		0.085	0.103	0.135	0.163		0.182		0.205	0.253		0.110	

Horn Strobe Ratings per UL 1971 & Anechoic at 24 VDC

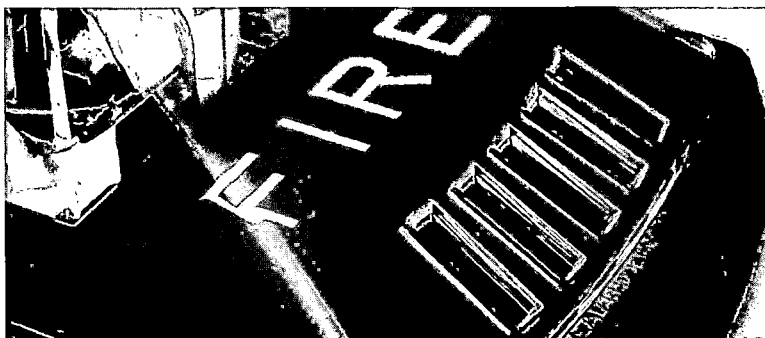
Model		UL Max Current* at Anechoic 99 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.082	0.095	0.102		0.148	0.176	0.197		0.242			0.282	0.125	0.159
HSC	8.0-33.0	0.082		0.102	0.141	0.148	0.176		0.197		0.242	0.282		0.125	

Model		UL Max Current* at Anechoic 95 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.073	0.083	0.087		0.139	0.163	0.186		0.230			0.272	0.122	0.153
HSC	8.0-33.0	0.073		0.087	0.128	0.139	0.163		0.186		0.230	0.272		0.122	

Model		UL Max Current* at Anechoic 90 dBA													
		24 VDC												12 VDC	
		15	15/75	30	60	75	95	110	115	135	150	177	185	15	15/75
HS	8.0-33.0	0.065	0.075	0.084		0.136	0.157	0.184		0.226			0.267	0.120	0.148
HSC	8.0-33.0	0.065		0.084	0.120	0.136	0.157		0.184		0.226	0.267		0.120	

Horn Ratings per UL Anechoic

Model	Regulated Voltage Range VDC	99 dB	95 dB	90 dB
HN	16-33.0	0.064	0.044	0.022
HNC	16-33.0	0.084	0.044	0.022
HN	8.0-17.5	0.047	0.026	0.017
HNC	8.0-17.5	0.047	0.026	0.017



* UL max current rating is the maximum RMS current within the listed voltage range (16-33 VDC for 24 VDC units). For strobes the UL max current is usually at the minimum listed voltage (16 VDC for 24 VDC units). For audibles the max current is usually at the maximum listed voltage (33 VDC for 24 VDC units). For unfiltered ratings, see installation instructions.

Specification & Ordering Information

Model	Strobe Candela	Sync w/ DSM or Wheelock Power Supplies	12/24 VDC*	Mounting Options
Horn Strobes				
HSR	15/1575/30/75/95/110/135/185	X	X	UMB**
HSW	15/1575/30/75/95/110/135/185	X	X	UMB**
HSRC	15/30/60/75/95/115/150/177	X	X	UMB**
HSWC	15/30/60/75/95/115/150/177	X	X	UMB**
Strobes				
STR	15/1575/30/75/95/110/135/185	X	X	UMB**
STW	15/1575/30/75/95/110/135/185	X	X	UMB**
STRC	15/30/60/75/95/115/150/177	X	X	UMB**
STWC	15/30/60/75/95/115/150/177	X	X	UMB**
Horn				
HNR		X	X	UMB**
HNW		X	X	UMB**
HNRC		X	X	UMB**
HNWC		X	X	UMB**

*12 VDC models feature 15 & 15/75 settings

**UMB = Universal Mounting Base

Model Legend

HN = Horn
ST = Strobe
HS = Horn Strobe
C = Ceiling Mount
W = White
R = Red

A = Agent Lettering
(Strobes only)
AL = Alert Lettering
(Strobes only)
N = No Lettering
(Strobes only)

Example 1: STRC = Strobe, Red, Ceiling Mount

Example 2: HSR = Horn Strobe, Red, Wall Mount

Example 3: HSW = Horn Strobe, White, Wall Mount

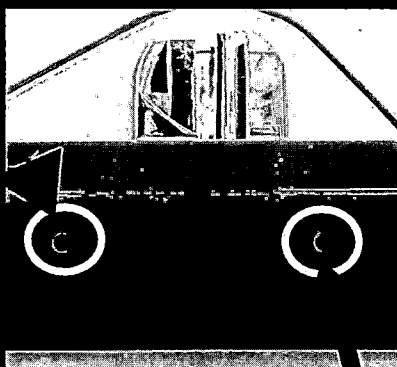
Example 4: STW-AL = Strobe, White, Wall Mount, Alert Lettering



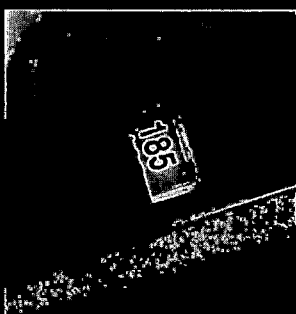
Example.



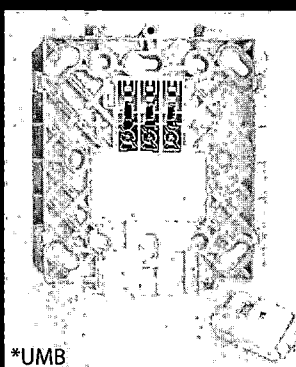
Example: HSWC



Voltage test points for quick troubleshooting and easy spot checking (wall models only)

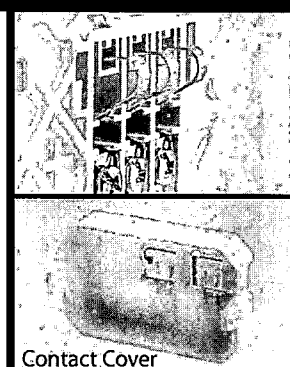


8 candela settings



*UMB

Common base for wall and ceiling with 5 mounting options



Contact Cover

NOTE: Due to continuous development of our products, specifications and offerings are subject to change without notice in accordance with Cooper Wheelock Inc., dba Cooper Notification standard terms and conditions.

Architects and Engineers Specifications

The notification appliances shall be Wheelock® Exceder™ Series HS Audible Strobe appliances, Series ST Visual Strobe appliances and Series HN Audible appliances or approved equals. The Series HS and ST Strobes shall be listed for UL Standard 1971 (Emergency Devices for the Hearing-Impaired) for Indoor Fire Protection Service. The Series HS and HN Audibles shall be UL Listed under Standard 464 (Fire Protective Signaling). All Series shall meet the requirements of FCC Part 15 Class B. All inputs shall be compatible with standard reverse polarity supervision of circuit wiring by a Fire Alarm Control Panel (FACP) with the ability to operate from 8 to 33 VDC. Indoor wall models shall incorporate voltage test points for easy voltage inspection.

The Series HS Audible Strobe and ST Strobe appliances shall produce a flash rate of one (1) flash per second over the Regulated Voltage Range and shall incorporate a Xenon flashtube enclosed in a rugged Lexan® lens. The Series shall be of low current design. Where Multi-Candela appliances are specified, the strobe intensity shall have 8 field selectable settings at 15, 15/75, 30, 75, 95, 110, 135, 185 candela for wall mount and 15, 30, 60, 75, 95, 115, 150, 177 candela for ceiling mount. The selector switch for selecting the candela shall be tamper resistant. The 15/75 candela strobe shall be specified when 15 candela UL Standard 1971 Listing with 75 candela on-axis is required (e.g. ADA compliance). Appliances with candela settings shall show the candela selection in a visible location at all times when installed.

The audible shall have a minimum of three (3) field selectable settings for dBA levels and shall have a choice of continuous or temporal (Code 3) audible outputs.

The Series HS Audible Strobe, ST Strobe and Series HN Audible shall incorporate a patented Universal Mounting Base that shall allow mounting to a single-gang, double-gang, 4-inch square, 3.5-inch octal, 4-inch octal or 100mm European type back boxes. Two wire appliance wiring shall be capable of directly connecting to the mounting base. Continuity checking of the entire NAC circuit prior to attaching any notification appliances shall be allowed. Product shall come with Contact Cover to protect contact springs. Removal of an appliance shall result in a supervision fault condition by the Fire Alarm Control Panel (FACP). The mounting base shall be the same base among all horn, strobe, horn strobe, wall and ceiling models. All notification appliances shall be backwards compatible.

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When synchronization is required, the appliance shall be compatible with Wheelock®'s DSM Sync Modules, Wheelock® Power Supplies or other manufacturer's panels with built-in Wheelock® Patented Sync Protocol. The strobes shall not drift out of synchronization at any time during operation. If the sync protocol fails to operate, the strobe shall revert to a non-synchronized flash-rate and still maintain (1) flash per second over its Regulated Voltage Range. The appliance shall also be designed so that the audible signal may be silenced while maintaining strobe activation when used with Wheelock® synchronization protocol.

Wall Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM

Ceiling Appliances – UL Standard 1971, UL Standard 464, California State Fire Marshal (CSFM), ULC, FM



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3 YEAR WARRANTY

Exceder - Spec Sheet 6/11

NJ Location
273 Branchport Ave.
Long Branch, NJ 07740
P: 800-631-2148
F: 732-222-8707
www.coopernotification.com

Cooper Notification is



COOPER Notification

INSTALLATION AND MAINTENANCE INSTRUCTIONS



156-3111-012

3825 Ohio Avenue, St. Charles, Illinois 60174
1-800-SENSOR2, FAX: 630-377-6583
www.systemsensor.com

C01224T/C01224TR
Carbon Monoxide Detector

SPECIFICATIONS

Electrical Specifications

System Voltage	Nominal: 12/24 VDC
	Min: 10 VDC
	Max: 33 VDC
Avg. Standby Current:	20 mA
Max Alarm Current:	40 mA (75 mA test)
Alarm Contact Ratings:	30 VDC @ 0.5 A
Trouble Contact Ratings:	30 VDC @ 0.5 A
Audible Signal (temp 4 tone):	85 dBA min. in alarm (at 10ft)
Max. Start-up Capacitance:	20 uF

Physical Specifications

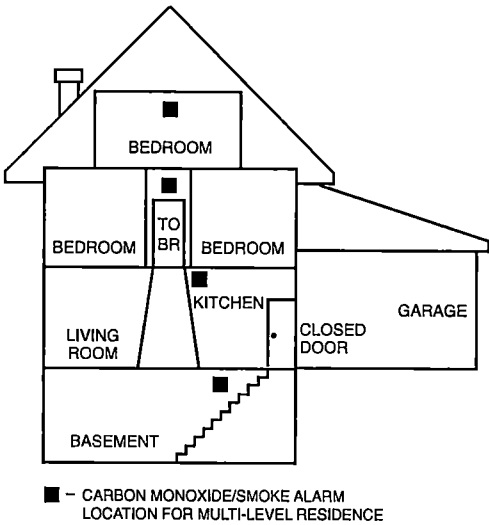
Operating Temperature Range:	0° to 40°C (32° to 104°F)
Operating Humidity Range:	22 - 90% %RH
Diameter:	6.0"
Height:	1.25"
Weight:	7 oz
Wire Gauge Acceptance:	14-22 AWC

NOTICE: This manual shall be left with the owner/user of this equipment. This product is intended for use in ordinary indoor locations.

GENERAL DESCRIPTION

- Listed to UL standard 2075
- Round shape allows for mounting in aesthetically demanding areas
- Six-wire, system monitored
- Optional CO detector replacement plate for previously installed detectors
- Local sounder
- Low current draw
- Alarm relay, Form C
- Trouble relay, Form A
- Dual LED's
- Test/Hush button
- SEMS wiring terminals
- Mount to single gang electrical box or surface mount to wall or ceiling
- Optional drywall anchors included

FIGURE 1. ALARM LOCATION DIAGRAM:



S0295-01

TABLE 1. DETECTOR OPERATION MODES:

OPERATION MODE	GREEN LED	RED LED	SOUNDER
Normal (standby)	Blink 1 per minute	OFF	OFF
Alarm	OFF	Temp 4*pattern	Temp 4* pattern
Alarm Test	OFF	Temp 4 pattern	Temp 4 pattern
RealTest® Mode	Blink 1 per second	OFF	Temp 4 pattern (after CO is sprayed)
End of Life	OFF	OFF	OFF
CO Trouble	OFF	Blink 1 per minute	OFF
Power Loss/Cell Fault	OFF	OFF	OFF

Alarm Test: Will send alarm signal to panel.

Hush feature/Alarm Silence: If required, the audible alarm can be silenced for 5 minutes by pushing the button marked "Test/Hush". The red alarm light will continue to flash in temp-4 pattern. If carbon monoxide is still present after the 5 minute hush period, the audible alarm will sound. The hush facility will not operate at levels above 350 ppm (parts per million) carbon monoxide.

RealTest® Alarm Silence: Alarm will automatically silence after about 20 seconds of alarm from spraying canned CO into the detector. Alarm Reset: Alarm automatically resets after CO has cleared from the sensor.

Trouble feature: When the sensor supervision is in a trouble condition (e.g. such as a sensor that has been tampered with, or the cell itself has prematurely dried out due to environmental conditions, etc.), the detector will send a trouble signal to the panel. The detector must then be replaced. The green LED turns off and the red LED blinks every minute when the detector is in trouble.

End of Life Timer feature: When the detector has reached the end of its life, the trouble contact will open. This indicates that the CO sensor inside the detector has passed the end of its life and must be replaced. This detector's lifespan is approximately ten years from the date of manufacture. The green LED turns off when the detector is in trouble. Periodically check the "Replace by" sticker located under the detector cover. The detector must be replaced by this date. Refer to Detector Replacement on page 3.

Per UL 2075, it is mandatory that a trouble signal be sent to the panel upon CO cell trouble or cell end of life. Refer to Figure 4 for wiring of the trouble relay.

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INSTALLATION GUIDELINES

Ceiling: Detector should be at least 12 inches from any wall.

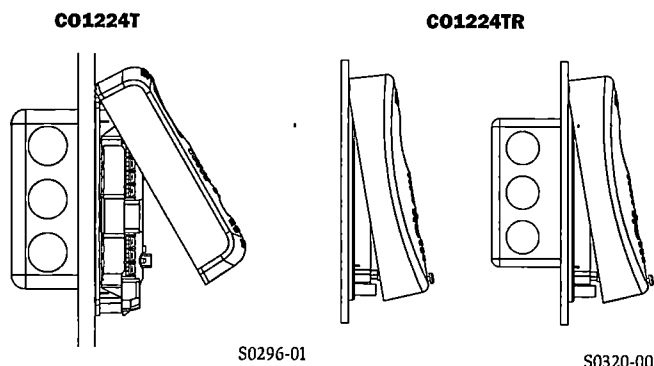
Wall: Detector should be at least as high as a light switch, and at least six inches from the ceiling.

- Do not install in any environment that does not comply with the detector's environmental specifications
- Install in accordance with NFPA 720—the Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment
- As of 2009, NFPA 720 defines standards for both commercial and residential installations of CO detectors. If the installation can be interpreted as a commercial application, consult the section of NFPA 720 that outlines commercial applications.
- For example, Chapter 5.5.5.3.1 states that carbon monoxide detectors shall be installed in accordance with manufacturers published instructions in the following locations:
 - (1) On the ceiling in the same room as permanently installed fuel burning appliances
 - (2) Centrally located on every habitable level and in every HVAC zone of the building
- If the installation can be interpreted as residential, consult the section of NFPA 720 that outlines residential applications.
- For example, chapter 9.4.1.1 states that carbon monoxide alarms or detectors shall be installed as follows:
 - (1) Outside each separate dwelling unit sleeping area in the immediate vicinity of the bedrooms
 - (2) On every level of a dwelling unit, including basements
 - (3) Other locations where required by applicable laws, codes or standards

MOUNTING

The CO1224T/CO1224TR can be ceiling-mounted or wall-mounted:

1. To a single gang box.
2. Direct mount to ceiling or to wall using drywall fasteners.

FIGURE 2. MOUNTING OF DETECTOR:**INSTALLATION****WIRING INSTALLATION GUIDELINES**

All wiring must be installed in compliance with the NFPA 70, National Electrical Code, applicable state and local codes, and any special requirements of the local Authority Having Jurisdiction (AHJ).

Proper wire gauges should be used. The conductors used to connect carbon monoxide detectors to the alarm control panel and accessory devices should be color-coded to reduce the likelihood of wiring errors. Improper connections can prevent a system from responding properly in the event of a CO.

The screw terminals in the mounting base will accept 14-22 gauge wire. Wire connections are made by stripping approximately 1/4" of insulation from the end of the feed wire, inserting it into the proper base terminal, and tightening the screw to secure the wire in place. Do not put wires more than 2 gauge apart under the same clamping plate.

WARNING: This product does not have a local audible trouble signal, and may fail without supervision if trouble loop remains unconnected.

WARNING: Gas detectors on a zone that is bypassed may not signal a trouble condition. Do not bypass zones used for gas detectors.

Wiring diagrams located on page 4, Figure 4.

WARNING

Remove power from alarm control unit or initiating device circuits before installing detectors.

1. Using a small, flat head screw driver, push in the small tab located on the underside of the detector. Once the snap is loosened, lift the bottom end of the cover up and unhinge the top to remove the cover.
2. Wire the detector base screw terminals per Figure 5.
3. Screw the base of the detector onto a single gang electrical box, or to the surface of the wall or ceiling. Use the hardware included in the packaging.
4. If mounting with the System Sensor replacement plate model CO-PLATE*:
 - * Hold replacement plate over desired mounting area.
 - * Use hook feature to hold CO1224T onto the replacement plate.
 - * Mount detector and plate together using hardware provided with the CO1224T.
5. Hinge the top portion of the cover onto the base; with the cover at a 45 degree angle, fit the hinges into the slots of the base.
6. Push the unhinged bottom portion of the cover down until it snaps into place.
7. After all detectors have been installed, apply power to the alarm control unit.
8. Test each detector as described in Testing.
9. Notify the proper authorities that the system is in operation.

CAUTION

Airborne dust particles can enter the detector. System Sensor recommends the installation of detectors after construction or any other dust producing activity. Carbon monoxide detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

TESTING

Detector must be tested after installation.

NOTE: Before testing, notify the proper authorities to avoid any nuisance alarms.

Ensure proper wiring and power is applied. After power up, allow 80 seconds for the detector to stabilize before testing.

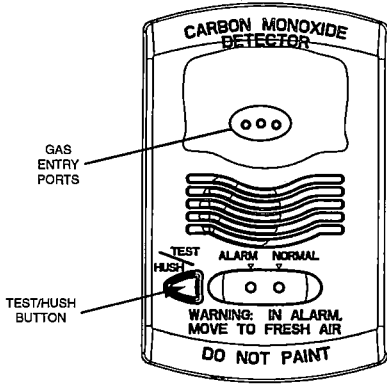
Test the CO1224T/CO1224TR detector as follows:

1. A test button is located on the detector housing (See Figure 4).
2. Use the tip of your finger to press and hold the test button for 1-4 seconds.
3. If the sounder beeps twice in the Temporal 4 tone and the LED's light up, the detector is operational.
4. The detector now enters Realtest speed up test mode indicated by a quickly blinking green LED. See Functional Gas Test section for instructions on testing with canned CO.

If a detector fails the above test method, its wiring should be checked. If the detector still fails after rewiring, it should be replaced.

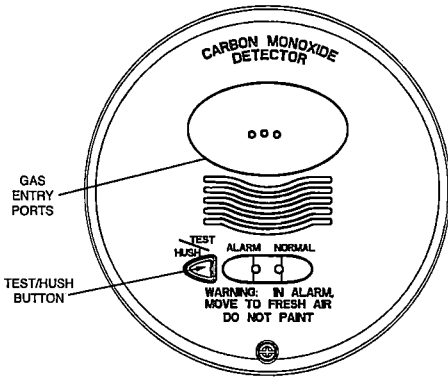
FIGURE 4. TEST BUTTON LOCATION AND OPERATION:

C01224T



S0298-00

C01224TR



S0321-00

FUNCTIONAL GAS TEST

NOTE: Check with local codes and the AHJ to determine whether or not a functional gas test is necessary for an installation. Solo C6 brand canned CO testing agent may be used to verify the detector's ability to sense CO by utilizing the RealTest® feature of the C01224T/C01224TR as follows:

1. Press the test button as described in Testing above.
2. Once the alarm has entered the speed-up test mode, indicated by a quickly flashing green LED, spray a small amount of CO agent within 1/4" of the alarm's gas entry ports (see Figure 3). The unit will go into alarm if gas entry is successful.
3. The detector will automatically exit the speed-up test mode 20-60 seconds after entering speed-up test mode.

Testing the detector will activate the alarm relay and send a signal to the panel.

CAUTION: This carbon monoxide detector is designed for indoor use only. Do not expose to rain or moisture. Do not knock or drop the detector. Do not open or tamper with the detector as this could cause malfunction. The detector will not protect against the risk of carbon monoxide poisoning if not properly wired. The detector will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

This carbon monoxide detector is NOT:

- Designed to detect smoke, fire or any gas other than carbon monoxide
- To be seen as a substitute for the proper servicing of fuel-burning appliances or the sweeping of chimneys.
- To be used on an intermittent basis, or as a portable alarm for the spillage of combustion products from fuel-burning appliances or chimneys.
- To be used in airplanes or any other aeronautical vehicle.

Carbon monoxide gas is a highly poisonous gas which is released when fuels are burnt. It is invisible, has no smell and is therefore impossible to detect with the human senses. Under normal conditions in a room where fuel burning appliances are well maintained and correctly ventilated, the amount of carbon monoxide released into the room by appliances should not be dangerous.

Symptoms of carbon monoxide poisoning: Carbon monoxide bonds to the hemoglobin in the blood and reduces the amount of oxygen being circulated in the body. The following symptoms are examples taken from NFPA 720. They represent approximate values for healthy adults:

Concentration (ppm CO)	Symptoms
200	Mild headache after 2-3 hours of exposure
400	Headache and nausea after 1-2 hours of exposure
800	headache, nausea, and dizziness after 45 minutes of exposure; collapse and unconsciousness after 2 hours of exposure

Many causes of reported carbon monoxide poisoning indicate that while victims are aware that they are not well, they become so disoriented that they are unable to save themselves by either exiting the building or calling for assistance. Young children and pets may be the first to be affected.

Per UL standard 2075, the C01224T/C01224TR has been tested to the sensitivity limits defined in UL standard 2034.

Alarm thresholds are as follows:

Parts Per Million	Detector response time, min.
30 ± 3ppm	No alarm within 30 days
70 ± 5ppm	60-240
150 ± 5ppm	10-50
400 ± 10ppm	4-15

What to do if the carbon monoxide detector goes into alarm:

Immediately move to a spot where fresh air is available, preferably outdoors. Find a phone in an area where the air is safe and call your security service provider. Tell your provider the detector alarm status, and that you require professional assistance in ridding your home of the carbon monoxide.

IMPORTANT: This detector should be tested and maintained regularly following National Fire Protection Association (NFPA) 720 requirements.

MAINTENANCE

Occasionally clean the outside casing with a cloth. Ensure that the holes on the front of the alarm are not blocked with dirt and dust.

Do not paint, and do not use cleaning agents, bleach, or polish on the detector.

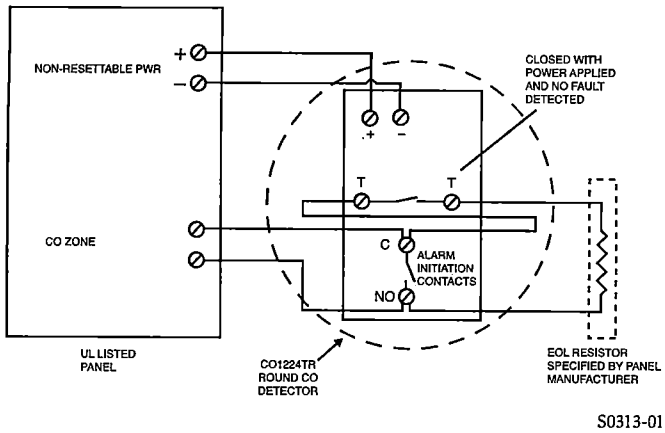
DETECTOR REPLACEMENT

This detector is manufactured with a long-life carbon monoxide sensor. Over time the sensor will lose sensitivity, and will need to be replaced with a new System Sensor carbon monoxide detector. This detector's lifespan is approximately ten years from the date of manufacture.

Periodically check the detector's replacement date. Remove the detector cover and refer to the sticker placed on the inside of the detector. The sticker will indicate the date that the detector shall be replaced.

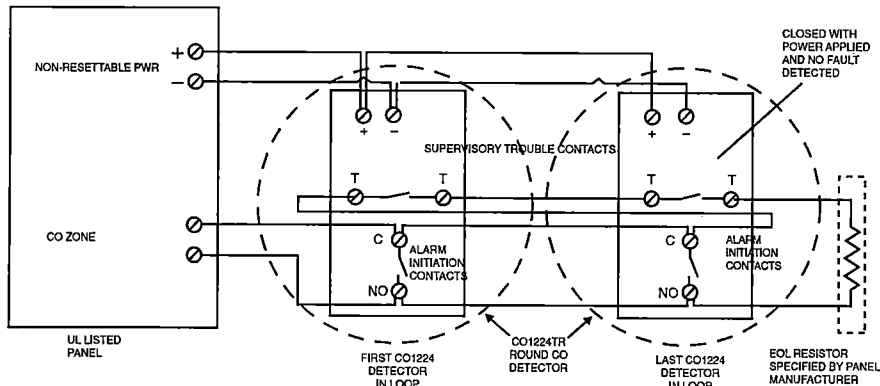
This detector is also equipped with a feature that will open the trouble relay once it has reached the end of its useful life. If this occurs, it is time to replace the detector.

NOTE: Before replacing the detector, notify the proper authorities that maintenance is being performed and the system will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent any unwanted alarms. Dispose of detector in accordance with any local regulations.

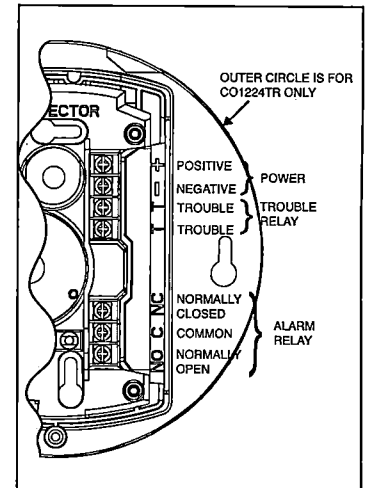
FIGURE 5. WIRING DIAGRAM:**SINGLE UNIT, SINGLE ZONE, 4 CONDUCTOR CABLE****CAUTION**

It should be noted the installation, operation, testing and maintenance of the CO1224T/CO1224TR is different than System Sensor conventional 4-wire smoke detectors, such as the i3 Series. Below are specific installation requirements for the CO1224T/CO1224TR:

- Connect to a non-resettable power supply
- Connect to a non-fire zone: Per NFPA 720 section 9.6.7.2 the CO1224T/CO1224TR shall not be connected to a zone that signals a fire condition
- Per NFPA 720 section 9.6.7, do not connect the CO1224T/CO1224TR on a zone with other fire or intrusion initiating devices - i.e. do not connect on the same zone as smoke detectors
- Wiring of the trouble relay is mandatory: Per UL Standard 2075 section 17.1.1 a detector shall send a trouble signal to the control panel upon an open circuit, a ground fault, sensor removal or sensor end of life
- If wiring one CO1224T/CO1224TR per zone: Use 4 conductors
- If wiring multiple CO1224T/CO1224TR detectors per zone: Use 4 conductors from panel to first CO1224T/CO1224TR, then use 6 conductors from the second CO1224T/CO1224TR to other detectors on the zone

MULTIPLE UNIT, SINGLE ZONE, 6 CONDUCTOR CABLE

Input powered (12 or 24 VDC) from UL Listed Fire/Burg Control Panel (Class 2).

**Please refer to insert for the limitations of Carbon Monoxide Detectors****FCC STATEMENT**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

THREE-YEAR LIMITED WARRANTY

System Sensor warrants its enclosed product to be free from defects in materials and workmanship under normal use and service for a period of three years from date of manufacture. System Sensor makes no other express warranty for the enclosed product. No agent, representative, dealer, or employee of the Company has the authority to increase or alter the obligations or limitations of this Warranty. The Company's obligation of this Warranty shall be limited to the replacement of any part of the product which is found to be defective in materials or workmanship under normal use and service during the three year period commencing with the date of manufacture. After phoning System Sensor's toll free number 800-SENSOR2 (736-7672) for a Return Authorization number, send defective units postage prepaid to: Honeywell, 12220 Rojas Drive, Suite 700, El Paso

System Sensor® is a registered trademark of Honeywell International, Inc.

TX 79936, USA. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

INSTALLATION AND MAINTENANCE INSTRUCTIONS



156-3111-012

3825 Ohio Avenue, St. Charles, Illinois 60174
1-800-SENSOR2, FAX: 630-377-6583
www.systemsensor.com

CO1224T/CO1224TR Carbon Monoxide Detector

SPECIFICATIONS

Electrical Specifications

System Voltage	Nominal: 12/24 VDC
	Min: 10 VDC
	Max: 33 VDC
Avg. Standby Current:	20 mA
Max Alarm Current:	40 mA (75 mA test)
Alarm Contact Ratings:	30 VDC @ 0.5 A
Trouble Contact Ratings:	30 VDC @ 0.5 A
Audible Signal (temp 4 tone):	85 dBA min. in alarm (at 10ft)
Max. Start-up Capacitance:	20 uF

Physical Specifications

Operating Temperature Range:	0° to 40°C (32° to 104°F)
Operating Humidity Range:	22 - 90% %RH
Diameter:	6.0"
Height:	1.25"
Weight:	7 oz
Wire Gauge Acceptance:	14-22 AWG

NOTICE: This manual shall be left with the owner/user of this equipment. This product is intended for use in ordinary indoor locations.

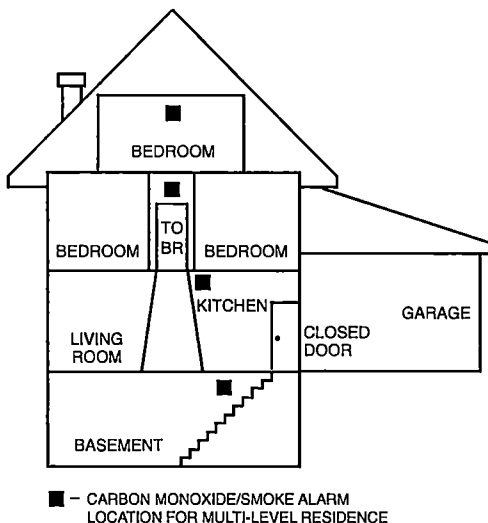
GENERAL DESCRIPTION

- Listed to UL standard 2075
- Round shape allows for mounting in aesthetically demanding areas
- Six-wire, system monitored
- Optional CO detector replacement plate for previously installed detectors
- Local sounder
- Low current draw
- Alarm relay, Form C
- Trouble relay, Form A
- Dual LED's
- Test/Hush button
- SEMS wiring terminals
- Mount to single gang electrical box or surface mount to wall or ceiling
- Optional drywall anchors included

TABLE 1. DETECTOR OPERATION MODES:

OPERATION MODE	GREEN LED	RED LED	SOUNDER
Normal (standby)	Blink 1 per minute	OFF	OFF
Alarm	OFF	Temp 4*pattern	Temp 4* pattern
Alarm Test	OFF	Temp 4 pattern	Temp 4 pattern
RealTest® Mode	Blink 1 per second	OFF	Temp 4 pattern (after CO is sprayed)
End of Life	OFF	OFF	OFF
CO Trouble	OFF	Blink 1 per minute	OFF
Power Loss/Cell Fault	OFF	OFF	OFF

FIGURE 1. ALARM LOCATION DIAGRAM:



S0295-01

Alarm Test: Will send alarm signal to panel.

Hush feature/Alarm Silence: If required, the audible alarm can be silenced for 5 minutes by pushing the button marked "Test/Hush". The red alarm light will continue to flash in temp-4 pattern. If carbon monoxide is still present after the 5 minute hush period, the audible alarm will sound. The hush facility will not operate at levels above 350 ppm (parts per million) carbon monoxide.

RealTest® Alarm Silence: Alarm will automatically silence after about 20 seconds of alarm from spraying canned CO into the detector. Alarm Reset: Alarm automatically resets after CO has cleared from the sensor.

Trouble feature: When the sensor supervision is in a trouble condition (e.g. such as a sensor that has been tampered with, or the cell itself has prematurely dried out due to environmental conditions, etc.), the detector will send a trouble signal to the panel. The detector must then be replaced. The green LED turns off and the red LED blinks every minute when the detector is in trouble.

End of Life Timer feature: When the detector has reached the end of its life, the trouble contact will open. This indicates that the CO sensor inside the detector has passed the end of its life and must be replaced. This detector's lifespan is approximately ten years from the date of manufacture. The green LED turns off when the detector is in trouble. Periodically check the "Replace by" sticker located under the detector cover. The detector must be replaced by this date. Refer to Detector Replacement on page 3.

Per UL 2075, it is mandatory that a trouble signal be sent to the panel upon CO cell trouble or cell end of life. Refer to Figure 4 for wiring of the trouble relay.

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INSTALLATION GUIDELINES

Ceiling: Detector should be at least 12 inches from any wall.

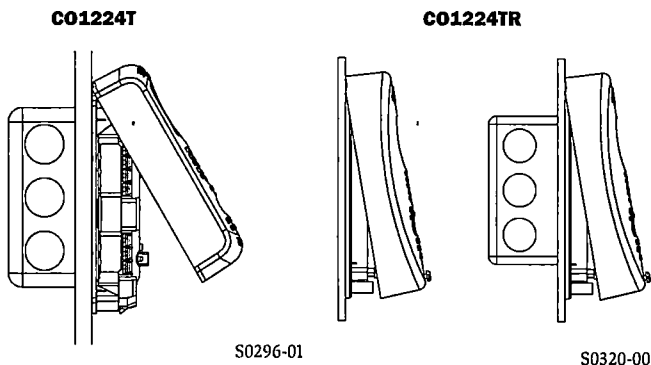
Wall: Detector should be at least as high as a light switch, and at least six inches from the ceiling.

- Do not install in any environment that does not comply with the detector's environmental specifications
- Install in accordance with NFPA 720—the Standard for the Installation of Carbon Monoxide (CO) Detection and Warning Equipment
- As of 2009, NFPA 720 defines standards for both commercial and residential installations of CO detectors. If the installation can be interpreted as a commercial application, consult the section of NFPA 720 that outlines commercial applications.
- For example, Chapter 5.5.5.3.1 states that carbon monoxide detectors shall be installed in accordance with manufacturers published instructions in the following locations:
 - (1) On the ceiling in the same room as permanently installed fuel burning appliances
 - (2) Centrally located on every habitable level and in every HVAC zone of the building
- If the installation can be interpreted as residential, consult the section of NFPA 720 that outlines residential applications.
- For example, chapter 9.4.1.1 states that carbon monoxide alarms or detectors shall be installed as follows:
 - (1) Outside each separate dwelling unit sleeping area in the immediate vicinity of the bedrooms
 - (2) On every level of a dwelling unit, including basements
 - (3) Other locations where required by applicable laws, codes or standards

MOUNTING

The CO1224T/CO1224TR can be ceiling-mounted or wall-mounted:

1. To a single gang box.
2. Direct mount to ceiling or to wall using drywall fasteners.

FIGURE 2. MOUNTING OF DETECTOR:**INSTALLATION****WIRING INSTALLATION GUIDELINES**

All wiring must be installed in compliance with the NFPA 70, National Electrical Code, applicable state and local codes, and any special requirements of the local Authority Having Jurisdiction (AHJ).

Proper wire gauges should be used. The conductors used to connect carbon monoxide detectors to the alarm control panel and accessory devices should be color-coded to reduce the likelihood of wiring errors. Improper connections can prevent a system from responding properly in the event of a CO.

The screw terminals in the mounting base will accept 14-22 gauge wire. Wire connections are made by stripping approximately 1/4" of insulation from the end of the feed wire, inserting it into the proper base terminal, and tightening the screw to secure the wire in place. Do not put wires more than 2 gauge apart under the same clamping plate.

WARNING: This product does not have a local audible trouble signal, and may fail without supervision if trouble loop remains unconnected.

WARNING: Gas detectors on a zone that is bypassed may not signal a trouble condition. Do not bypass zones used for gas detectors.

Wiring diagrams located on page 4, Figure 4.

WARNING

Remove power from alarm control unit or initiating device circuits before installing detectors.

1. Using a small, flat head screw driver, push in the small tab located on the underside of the detector. Once the snap is loosened, lift the bottom end of the cover up and unhinge the top to remove the cover.
2. Wire the detector base screw terminals per Figure 5.
3. Screw the base of the detector onto a single gang electrical box, or to the surface of the wall or ceiling. Use the hardware included in the packaging.
4. If mounting with the System Sensor replacement plate model CO-PLATE*:
 - * Hold replacement plate over desired mounting area.
 - * Use hook feature to hold CO1224T onto the replacement plate.
 - * Mount detector and plate together using hardware provided with the CO1224T.
5. Hinge the top portion of the cover onto the base; with the cover at a 45 degree angle, fit the hinges into the slots of the base.
6. Push the unhinged bottom portion of the cover down until it snaps into place.
7. After all detectors have been installed, apply power to the alarm control unit.
8. Test each detector as described in Testing.
9. Notify the proper authorities that the system is in operation.

CAUTION

Airborne dust particles can enter the detector. System Sensor recommends the installation of detectors after construction or any other dust producing activity. Carbon monoxide detectors are not to be used with detector guards unless the combination has been evaluated and found suitable for that purpose.

TESTING

Detector must be tested after installation.

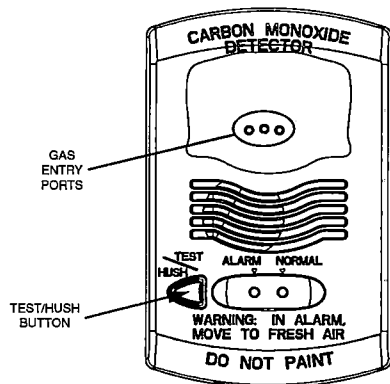
NOTE: Before testing, notify the proper authorities to avoid any nuisance alarms.

Ensure proper wiring and power is applied. After power up, allow 80 seconds for the detector to stabilize before testing.

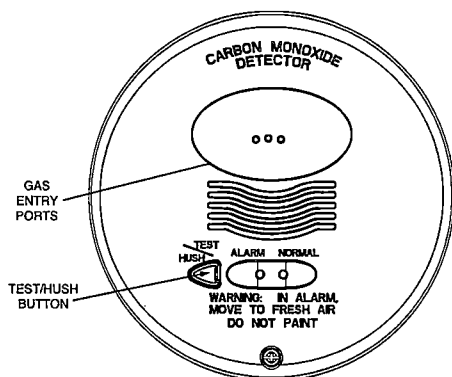
Test the CO1224T/CO1224TR detector as follows:

1. A test button is located on the detector housing (See Figure 4).
2. Use the tip of your finger to press and hold the test button for 1-4 seconds.
3. If the sounder beeps twice in the Temporal 4 tone and the LED's light up, the detector is operational.
4. The detector now enters Realtest speed up test mode indicated by a quickly blinking green LED. See Functional Gas Test section for instructions on testing with canned CO.

If a detector fails the above test method, its wiring should be checked. If the detector still fails after rewiring, it should be replaced.

FIGURE 4. TEST BUTTON LOCATION AND OPERATION:**CO1224T**

S0298-00

CO1224TR

S0321-00

FUNCTIONAL GAS TEST

NOTE: Check with local codes and the AHJ to determine whether or not a functional gas test is necessary for an installation.

Solo C6 brand canned CO testing agent may be used to verify the detector's ability to sense CO by utilizing the RealTest® feature of the CO1224T/CO1224TR as follows:

1. Press the test button as described in Testing above.
2. Once the alarm has entered the speed-up test mode, indicated by a quickly flashing green LED, spray a small amount of CO agent within 1/4" of the alarm's gas entry ports (see Figure 3). The unit will go into alarm if gas entry is successful.
3. The detector will automatically exit the speed-up test mode 20-60 seconds after entering speed-up test mode.

Testing the detector will activate the alarm relay and send a signal to the panel.

CAUTION: This carbon monoxide detector is designed for indoor use only. Do not expose to rain or moisture. Do not knock or drop the detector. Do not open or tamper with the detector as this could cause malfunction. The detector will not protect against the risk of carbon monoxide poisoning if not properly wired. The detector will only indicate the presence of carbon monoxide gas at the sensor. Carbon monoxide gas may be present in other areas.

This carbon monoxide detector is NOT:

- Designed to detect smoke, fire or any gas other than carbon monoxide
- To be seen as a substitute for the proper servicing of fuel-burning appliances or the sweeping of chimneys.
- To be used on an intermittent basis, or as a portable alarm for the spillage of combustion products from fuel-burning appliances or chimneys.
- To be used in airplanes or any other aeronautical vehicle.

Carbon monoxide gas is a highly poisonous gas which is released when fuels are burnt. It is invisible, has no smell and is therefore impossible to detect with the human senses. Under normal conditions in a room where fuel burning appliances are well maintained and correctly ventilated, the amount of carbon monoxide released into the room by appliances should not be dangerous.

Symptoms of carbon monoxide poisoning: Carbon monoxide bonds to the hemoglobin in the blood and reduces the amount of oxygen being circulated in the body. The following symptoms are examples taken from NFPA 720. They represent approximate values for healthy adults:

Concentration (ppm CO)	Symptoms
200	Mild headache after 2-3 hours of exposure
400	Headache and nausea after 1-2 hours of exposure
800	headache, nausea, and dizziness after 45 minutes of exposure; collapse and unconsciousness after 2 hours of exposure

Many causes of reported carbon monoxide poisoning indicate that while victims are aware that they are not well, they become so disoriented that they are unable to save themselves by either exiting the building or calling for assistance. Young children and pets may be the first to be affected.

Per UL standard 2075, the CO1224T/CO1224TR has been tested to the sensitivity limits defined in UL standard 2034.

Alarm thresholds are as follows:

Parts Per Million	Detector response time, min.
30 ± 3ppm	No alarm within 30 days
70 ± 5ppm	60-240
150 ± 5ppm	10-50
400 ± 10ppm	4-15

What to do if the carbon monoxide detector goes into alarm:

Immediately move to a spot where fresh air is available, preferably outdoors. Find a phone in an area where the air is safe and call your security service provider. Tell your provider the detector alarm status, and that you require professional assistance in ridding your home of the carbon monoxide.

IMPORTANT: This detector should be tested and maintained regularly following National Fire Protection Association (NFPA) 720 requirements.

MAINTENANCE

Occasionally clean the outside casing with a cloth. Ensure that the holes on the front of the alarm are not blocked with dirt and dust.

Do not paint, and do not use cleaning agents, bleach, or polish on the detector.

DETECTOR REPLACEMENT

This detector is manufactured with a long-life carbon monoxide sensor. Over time the sensor will lose sensitivity, and will need to be replaced with a new System Sensor carbon monoxide detector. This detector's lifespan is approximately ten years from the date of manufacture.

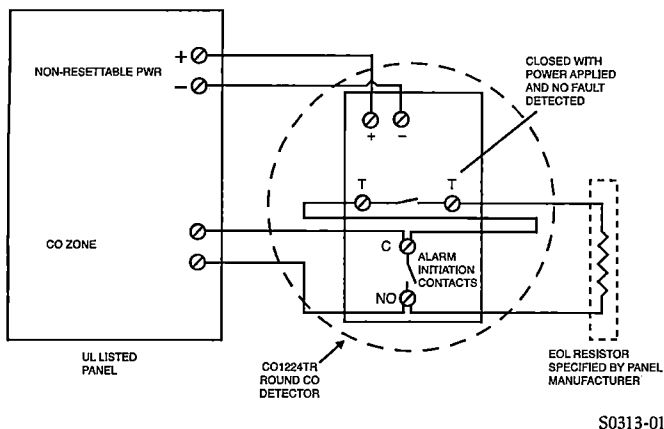
Periodically check the detector's replacement date. Remove the detector cover and refer to the sticker placed on the inside of the detector. The sticker will indicate the date that the detector shall be replaced.

This detector is also equipped with a feature that will open the trouble relay once it has reached the end of its useful life. If this occurs, it is time to replace the detector.

NOTE: Before replacing the detector, notify the proper authorities that maintenance is being performed and the system will be temporarily out of service. Disable the zone or system undergoing maintenance to prevent any unwanted alarms. Dispose of detector in accordance with any local regulations.

FIGURE 5. WIRING DIAGRAM:

SINGLE UNIT, SINGLE ZONE, 4 CONDUCTOR CABLE

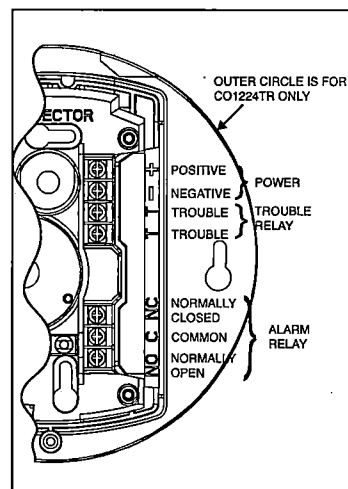
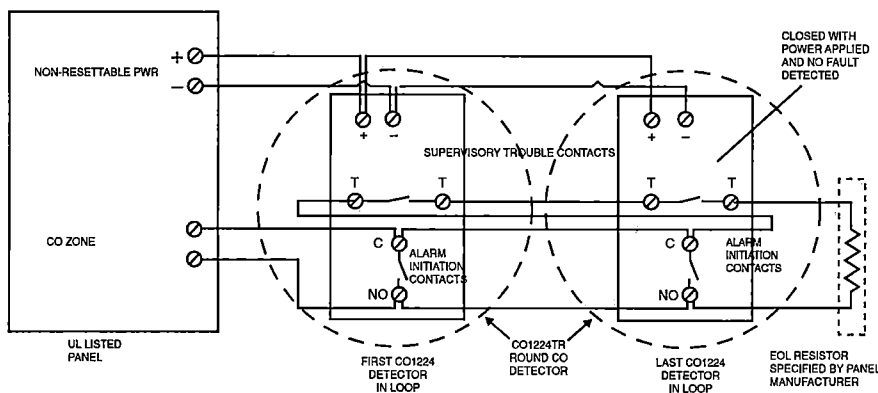


CAUTION

It should be noted the installation, operation, testing and maintenance of the CO1224T/CO1224TR is different than System Sensor conventional 4-wire smoke detectors, such as the i3 Series. Below are specific installation requirements for the CO1224T/CO1224TR:

- Connect to a non-resettable power supply
- Connect to a non-fire zone: Per NFPA 720 section 9.6.7.2 the CO1224T/CO1224TR shall not be connected to a zone that signals a fire condition
- Per NFPA 720 section 9.6.7, do not connect the CO1224T/CO1224TR on a zone with other fire or intrusion initiating devices - i.e. do not connect on the same zone as smoke detectors
- Wiring of the trouble relay is mandatory: Per UL Standard 2075 section 17.1.1 a detector shall send a trouble signal to the control panel upon an open circuit, a ground fault, sensor removal or sensor end of life
- If wiring one CO1224T/CO1224TR per zone: Use 4 conductors
- If wiring multiple CO1224T/CO1224TR detectors per zone: Use 4 conductors from panel to first CO1224T/CO1224TR, then use 6 conductors from the second CO1224T/CO1224TR to other detectors on the zone

MULTIPLE UNIT, SINGLE ZONE, 6 CONDUCTOR CABLE



Input powered (12 or 24 VDC) from UL Listed Fire/Burg Control Panel (Class 2).

Please refer to insert for the limitations of Carbon Monoxide Detectors

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This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
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TX 79936, USA. Please include a note describing the malfunction and suspected cause of failure. The Company shall not be obligated to replace units which are found to be defective because of damage, unreasonable use, modifications, or alterations occurring after the date of manufacture. In no case shall the Company be liable for any consequential or incidental damages for breach of this or any other Warranty, expressed or implied whatsoever, even if the loss or damage is caused by the Company's negligence or fault. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

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MMF-300(A) Series, MDF-300(A)

Addressable Monitor Modules



Addressable Devices

General

Four different monitor modules are available for Fire•Lite's intelligent control panels to suit a variety of applications. Monitor modules are used to supervise a circuit of dry-contact input devices, such as conventional heat detectors and pull stations, or monitor and power a circuit of two-wire smoke detectors (MMF-302(A)).

MMF-300(A) is a standard-sized module (typically mounts to a 4" [10.16 cm] square box) that supervises either a Style D (Class A) or Style B (Class B) circuit of dry-contact input devices.

MMF-301(A) is a miniature monitor module a mere 1.3" (3.302 cm) H x 2.75" (6.985 cm) W x 0.5" (1.270 cm) D used to supervise a Style B (Class B) circuit of dry-contact input devices. Its compact design allows the MMF-301(A) to be mounted in a single-gang box behind the device it monitors.

MMF-302(A) is a standard-sized module used to monitor and supervise compatible two-wire, 24 volt, smoke detectors on a Style D (Class A) or Style B (Class B) circuit.

MDF-300(A) is a standard-sized dual monitor module used to monitor and supervise two independent two-wire Style B (Class B) dry-contact initiating device circuits (IDCs) at two separate, consecutive addresses in intelligent, two-wire systems.

LiteSpeed™ is a communication protocol developed by Fire•Lite Engineering that greatly enhances the speed of communication between analog intelligent devices. Intelligent devices communicate in a grouped fashion. If one of the devices within the group has new information, the panel CPU stops the group poll and concentrates on single points. The net effect is response speed greater than five times that of other designs.

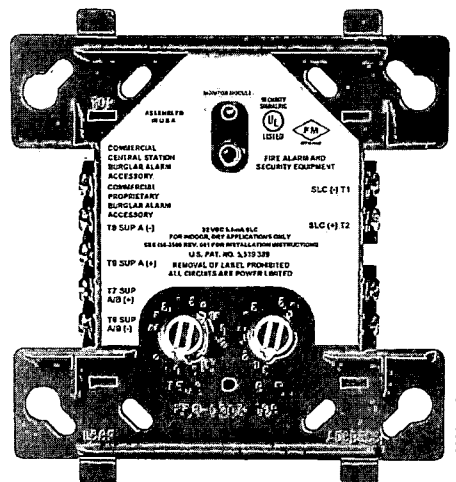
MMF-300(A) Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the control panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct-dial entry of address: 01 – 159 on MS-9600 series panels, 01 – 99 on other compatible systems.
- LED flashes during normal operation and latches on steady to indicate alarm.

The MMF-300(A) Monitor Module is intended for use in intelligent, two-wire systems, where the individual address of each module is selected using the built-in rotary switches. It provides either a two-wire or four-wire fault-tolerant Initiating Device Circuit (IDC) for normally-open-contact fire alarm and supervisory devices. The module has a panel-controlled LED indicator. The MMF-300(A) can be used to replace M300(A) modules in existing systems.

MMF-300(A) APPLICATIONS

Use to monitor a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-open dry-contact alarm activation devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit



MMF-300(A) (Type H)

may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 47K ohm End-of-Line Resistor (provided) terminates the Style B circuit. No resistor is required for supervision of the Style D circuit.

MMF-300(A) OPERATION

Each MMF-300(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

MMF-300(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.0 mA (LED on).

Average operating current: 350 μ A (LED flashing), 1 communication every 5 seconds, 47K EOL.

Maximum IDC wiring resistance: 40 ohms.

EOL resistance: 47K ohms.

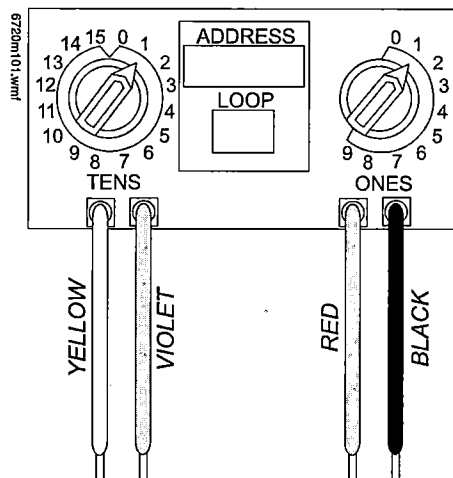
Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

MMF-301(A) Mini Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- Tinned, stripped leads for ease of wiring.
- Direct-dial entry of address: 01 – 159 on MS-9600 series panels, 01 – 99 on other compatible systems



The MMF-301(A) Mini Monitor Module can be installed in a single-gang junction directly behind the monitored unit. Its small size and light weight allow it to be installed without rigid mounting. The MMF-301(A) is intended for use in intelligent, two-wire systems where the individual address of each module is selected using rotary switches. It provides a two-wire initiating device circuit for normally-open-contact fire alarm devices. The MMF-301(A) can be used to replace M301(A) modules in existing systems.

MMF-301(A) APPLICATIONS

Use to monitor a single device or a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-open dry-contact devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit/device is wired as an NFPA Style B (Class B) Initiating Device Circuit. A 47K ohm End-of-Line Resistor (provided) terminates the circuit.

MMF-301(A) OPERATION

Each MMF-301(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC).

MMF-301(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Average operating current: 350 μ A, 1 communication every 5 seconds, 47k EOL; 600 μ A Max. (Communicating, IDC Shorted).

Maximum IDC wiring resistance: 40 ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 400 μ A.

EOL resistance: 47K ohms.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 1.3" (3.302 cm) high x 2.75" (6.985 cm) wide x 0.65" (1.651 cm) deep.

Wire length: 6" (15.24 cm) minimum.

MMF-302(A) Interface Module

- Supports compatible two-wire smoke detectors.
- Supervises IDC wiring and connection of external power source.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct-dial entry of address: 01 – 159 on MS-9600 series panels, 01 – 99 on other compatible systems.
- LED flashes during normal operation.
- LED latches steady to indicate alarm on command from control panel.

The MMF-302(A) Interface Module is intended for use in intelligent, addressable systems, where the individual address of each module is selected using built-in rotary switches. This module allows intelligent panels to interface and monitor two-wire conventional smoke detectors. It transmits the status (normal, open, or alarm) of one full zone of conventional detectors back to the control panel. All two-wire detectors being monitored must be UL compatible with the module. The MMF-302(A) can be used to replace M302(A) modules in existing systems.

MMF-302 (A) APPLICATIONS

Use the MMF-302(A) to monitor a zone of two-wire smoke detectors. The monitored circuit may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 3.9 K ohm End-of-Line Resistor (provided) terminates the end of the Style B or D (class B or A) circuit (maximum IDC loop resistance is 25 ohms). Install ELR across terminals 8 and 9 for Style D application.

MMF-302(A) OPERATION

Each MMF-302(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

MMF-302(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.1 mA (LED on).

Maximum IDC wiring resistance: 25 ohms.

Average operating current: 300 μ A, 1 communication and 1 LED flash every 5 seconds, 3.9k eol.

EOL resistance: 3.9K ohms.

External supply voltage (between Terminals T3 and T4): DC voltage: 24 volts power limited. Ripple voltage: 0.1 Vrms maximum. Current: 90 mA per module maximum.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

MDF-300(A) Dual Monitor Module

The MDF-300(A) Dual Monitor Module is intended for use in intelligent, two-wire systems. It provides two independent two-wire initiating device circuits (IDCs) at two separate, consecutive addresses. It is capable of monitoring normally open contact fire alarm and supervisory devices. The module has a single panel-controlled LED.

NOTE: The MDF-300(A) provides two Style B (Class B) IDC circuits ONLY. Style D (Class A) IDC circuits are NOT supported in any application.

MDF-300(A) SPECIFICATIONS

Normal operating voltage range: 15 to 32 VDC.

Maximum current draw: 6.4 mA (LED on).

Average operating current: 750 μ A (LED flashing).

Maximum IDC wiring resistance: 1,500 ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 240 μ A

EOL resistance: 47K ohms.

Maximum SLC Wiring resistance: 40 Ohms.

Temperature range: 32° to 120°F (0° to 49°C).

Humidity range: 10% to 93% (non-condensing).

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 2.125" (5.398 cm) deep.

MDF-300(A) AUTOMATIC ADDRESSING

The MDF-300(A) automatically assigns itself to two addressable points, starting with the original address. For example, if the MDF-300(A) is set to address "26", then it will automatically assign itself to addresses "26" and "27".

NOTE: "Ones" addresses on the MDF-300(A) are 0, 2, 4, 6, or 8 only. Terminals 6 and 7 use the first address, and terminals 8 and 9 use the second address.



CAUTION:

Avoid duplicating addresses on the system.

Installation

MMF-300(A), MMF-302(A), and MDF-300(A) modules mount directly to a standard 4" (10.16 cm) square, 2.125" (5.398 cm) deep, electrical box. They may also be mounted to the SMB500 surface-mount box. Mounting hardware and installation instructions are provided with each module. All wiring must conform to applicable local codes, ordinances, and regulations. These modules are intended for power-limited wiring only.

The MMF-301(A) module is intended to be wired and mounted without rigid connections inside a standard electrical box. All wiring must conform to applicable local codes, ordinances, and regulations.

Agency Listings and Approvals

In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL: S2424
- ULC: S2424
- FM Approved
- CSFM: 7300-0075:0185
- MEA: 72-01-E

Product Line Information

NOTE: "A" suffix indicates ULC-listed model.

MMF-300(A): Monitor module.

MMF-301(A): Monitor module, miniature.

MMF-302(A): Monitor module, two-wire detectors.

MDF-300(A): Monitor module, dual, two independent Class B circuits.

SMB500: Optional surface-mount backbox.

NOTE: See installation instructions and refer to the SLC Wiring Manual, PN 51309.

Architects'/Engineers' Specifications

Specifications of these devices and all FireLite products are available from FireLite.

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This document is not intended to be used for installation purposes.
We try to keep our product information up-to-date and accurate.
We cannot cover all specific applications or anticipate all requirements.
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www.firelite.com

MMF-300(A) Series, MDF-300(A)

Addressable Monitor Modules



Addressable Devices

General

Four different monitor modules are available for Fire-Lite's intelligent control panels to suit a variety of applications. Monitor modules are used to supervise a circuit of dry-contact input devices, such as conventional heat detectors and pull stations, or monitor and power a circuit of two-wire smoke detectors (MMF-302(A)).

MMF-300(A) is a standard-sized module (typically mounts to a 4" [10.16 cm] square box) that supervises either a Style D (Class A) or Style B (Class B) circuit of dry-contact input devices.

MMF-301(A) is a miniature monitor module a mere 1.3" (3.302 cm) H x 2.75" (6.985 cm) W x 0.5" (1.270 cm) D used to supervise a Style B (Class B) circuit of dry-contact input devices. Its compact design allows the MMF-301(A) to be mounted in a single-gang box behind the device it monitors.

MMF-302(A) is a standard-sized module used to monitor and supervise compatible two-wire, 24 volt, smoke detectors on a Style D (Class A) or Style B (Class B) circuit.

MDF-300(A) is a standard-sized dual monitor module used to monitor and supervise two independent two-wire Style B (Class B) dry-contact initiating device circuits (IDCs) at two separate, consecutive addresses in intelligent, two-wire systems.

LiteSpeed™ is a communication protocol developed by Fire-Lite Engineering that greatly enhances the speed of communication between analog intelligent devices. Intelligent devices communicate in a grouped fashion. If one of the devices within the group has new information, the panel CPU stops the group poll and concentrates on single points. The net effect is response speed greater than five times that of other designs.

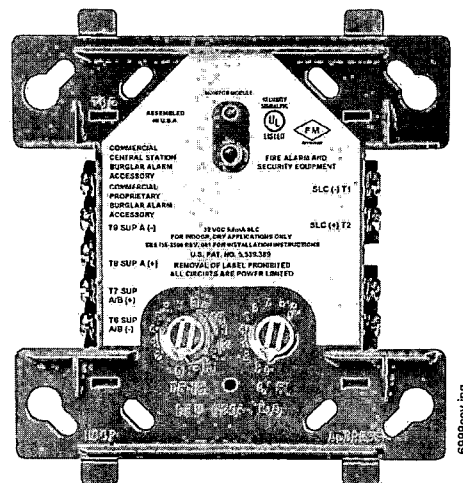
MMF-300(A) Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the control panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct-dial entry of address: 01 – 159 on MS-9600 series panels, 01 – 99 on other compatible systems.
- LED flashes during normal operation and latches on steady to indicate alarm.

The MMF-300(A) Monitor Module is intended for use in intelligent, two-wire systems, where the individual address of each module is selected using the built-in rotary switches. It provides either a two-wire or four-wire fault-tolerant Initiating Device Circuit (IDC) for normally-open-contact fire alarm and supervisory devices. The module has a panel-controlled LED indicator. The MMF-300(A) can be used to replace M300(A) modules in existing systems.

MMF-300(A) APPLICATIONS

Use to monitor a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-open dry-contact alarm activation devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit



MMF-300(A) (Type H)

may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 47K ohm End-of-Line Resistor (provided) terminates the Style B circuit. No resistor is required for supervision of the Style D circuit.

MMF-300(A) OPERATION

Each MMF-300(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

MMF-300(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.0 mA (LED on).

Average operating current: 350 µA (LED flashing), 1 communication every 5 seconds, 47k EOL.

Maximum IDC wiring resistance: 40 ohms.

EOL resistance: 47K ohms.

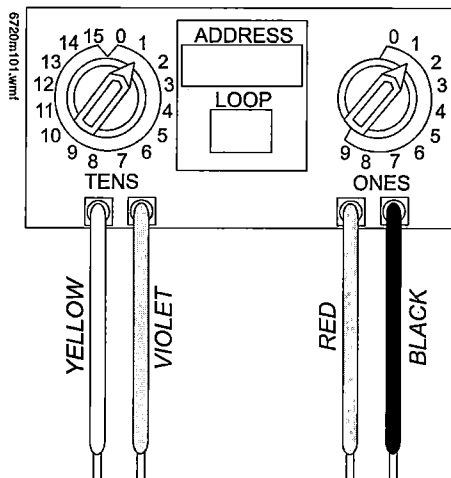
Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

MMF-301(A) Mini Monitor Module

- Built-in type identification automatically identifies this device as a monitor module to the panel.
- Powered directly by two-wire SLC loop. No additional power required.
- High noise (EMF/RFI) immunity.
- Tinned, stripped leads for ease of wiring.
- Direct-dial entry of address: 01 – 159 on MS-9600 series panels, 01 – 99 on other compatible systems



The MMF-301(A) Mini Monitor Module can be installed in a single-gang junction directly behind the monitored unit. Its small size and light weight allow it to be installed without rigid mounting. The MMF-301(A) is intended for use in intelligent, two-wire systems where the individual address of each module is selected using rotary switches. It provides a two-wire initiating device circuit for normally-open-contact fire alarm devices. The MMF-301(A) can be used to replace M301(A) modules in existing systems.

MMF-301(A) APPLICATIONS

Use to monitor a single device or a zone of four-wire smoke detectors, manual fire alarm pull stations, waterflow devices, or other normally-open dry-contact devices. May also be used to monitor normally-open supervisory devices with special supervisory indication at the control panel. Monitored circuit/device is wired as an NFPA Style B (Class B) Initiating Device Circuit. A 47K ohm End-of-Line Resistor (provided) terminates the circuit.

MMF-301(A) OPERATION

Each MMF-301(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC).

MMF-301(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Average operating current: 350 μ A, 1 communication every 5 seconds, 47k EOL; 600 μ A Max. (Communicating, IDC Shorted).

Maximum IDC wiring resistance: 40 ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 400 μ A.

EOL resistance: 47K ohms.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 1.3" (3.302 cm) high x 2.75" (6.985 cm) wide x 0.65" (1.651 cm) deep.

Wire length: 6" (15.24 cm) minimum.

MMF-302(A) Interface Module

- Supports compatible two-wire smoke detectors.
- Supervises IDC wiring and connection of external power source.
- High noise (EMF/RFI) immunity.
- SEMS screws with clamping plates for ease of wiring.
- Direct-dial entry of address: 01 – 159 on MS-9600 series panels, 01 – 99 on other compatible systems.
- LED flashes during normal operation.
- LED latches steady to indicate alarm on command from control panel.

The MMF-302(A) Interface Module is intended for use in intelligent, addressable systems, where the individual address of each module is selected using built-in rotary switches. This module allows intelligent panels to interface and monitor two-wire conventional smoke detectors. It transmits the status (normal, open, or alarm) of one full zone of conventional detectors back to the control panel. All two-wire detectors being monitored must be UL compatible with the module. The MMF-302(A) can be used to replace M302(A) modules in existing systems.

MMF-302 (A) APPLICATIONS

Use the MMF-302(A) to monitor a zone of two-wire smoke detectors. The monitored circuit may be wired as an NFPA Style B (Class B) or Style D (Class A) Initiating Device Circuit. A 3.9 K ohm End-of-Line Resistor (provided) terminates the end of the Style B or D (class B or A) circuit (maximum IDC loop resistance is 25 ohms). Install ELR across terminals 8 and 9 for Style D application.

MMF-302(A) OPERATION

Each MMF-302(A) uses one of the available module addresses on an SLC loop. It responds to regular polls from the control panel and reports its type and the status (open/normal/short) of its Initiating Device Circuit (IDC). A flashing LED indicates that the module is in communication with the control panel. The LED latches steady on alarm (subject to current limitations on the loop).

MMF-302(A) SPECIFICATIONS

Nominal operating voltage: 15 to 32 VDC.

Maximum current draw: 5.1 mA (LED on).

Maximum IDC wiring resistance: 25 ohms.

Average operating current: 300 μ A, 1 communication and 1 LED flash every 5 seconds, 3.9k eol.

EOL resistance: 3.9K ohms.

External supply voltage (between Terminals T3 and T4): DC voltage: 24 volts power limited. Ripple voltage: 0.1 Vrms maximum. Current: 90 mA per module maximum.

Temperature range: 32°F to 120°F (0°C to 49°C).

Humidity range: 10% to 93% noncondensing.

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 1.25" (3.175 cm) deep. Mounts to a 4" (10.16 cm) square x 2.125" (5.398 cm) deep box.

MDF-300(A) Dual Monitor Module

The MDF-300(A) Dual Monitor Module is intended for use in intelligent, two-wire systems. It provides two independent two-wire initiating device circuits (IDCs) at two separate, consecutive addresses. It is capable of monitoring normally open contact fire alarm and supervisory devices. The module has a single panel-controlled LED.

NOTE: The MDF-300(A) provides two Style B (Class B) IDC circuits ONLY. Style D (Class A) IDC circuits are NOT supported in any application.

MDF-300(A) SPECIFICATIONS

Normal operating voltage range: 15 to 32 VDC.

Maximum current draw: 6.4 mA (LED on).

Average operating current: 750 μ A (LED flashing).

Maximum IDC wiring resistance: 1,500 ohms.

Maximum IDC Voltage: 11 Volts.

Maximum IDC Current: 240 μ A

EOL resistance: 47K ohms.

Maximum SLC Wiring resistance: 40 Ohms.

Temperature range: 32° to 120°F (0° to 49°C).

Humidity range: 10% to 93% (non-condensing).

Dimensions: 4.5" (11.43 cm) high x 4" (10.16 cm) wide x 2.125" (5.398 cm) deep.

MDF-300(A) AUTOMATIC ADDRESSING

The MDF-300(A) automatically assigns itself to two addressable points, starting with the original address. For example, if the MDF-300(A) is set to address "26", then it will automatically assign itself to addresses "26" and "27".

NOTE: "Ones" addresses on the MDF-300(A) are 0, 2, 4, 6, or 8 only. Terminals 6 and 7 use the first address, and terminals 8 and 9 use the second address.



CAUTION:

Avoid duplicating addresses on the system.

Product Line Information

NOTE: "A" suffix indicates ULC-listed model.

MMF-300(A): Monitor module.

MMF-301(A): Monitor module, miniature.

MMF-302(A): Monitor module, two-wire detectors.

MDF-300(A): Monitor module, dual, two independent Class B circuits.

SMB500: Optional surface-mount backbox.

NOTE: See installation instructions and refer to the SLC Wiring Manual, PN 51309.

Architects'/Engineers' Specifications

Specifications of these devices and all FireLite products are available from FireLite.

Installation

MMF-300(A), MMF-302(A), and MDF-300(A) modules mount directly to a standard 4" (10.16 cm) square, 2.125" (5.398 cm) deep, electrical box. They may also be mounted to the SMB500 surface-mount box. Mounting hardware and installation instructions are provided with each module. All wiring must conform to applicable local codes, ordinances, and regulations. These modules are intended for power-limited wiring only.

The MMF-301(A) module is intended to be wired and mounted without rigid connections inside a standard electrical box. All wiring must conform to applicable local codes, ordinances, and regulations.

Agency Listings and Approvals

In some cases, certain modules may not be listed by certain approval agencies, or listing may be in process. Consult factory for latest listing status.

- UL: S2424
- ULC: S2424
- FM Approved
- CSFM: 7300-0075:0185
- MEA: 72-01-E

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