Spirit Unlimited
1A

Page 1

CONSTRUCTION PERMIT APPLICATION

RECEIVED
AUG 17 1989
INSPECTION

I. IDENTIFICATION

1. Proposed Work at: CoR Route 70 + Chambersbridge Rd, Shop Rite Center
2. Owner Name: B.C. REST. OF BRICKTOWN INC Tel. (201) 349-2710
   Address: Cor. Routes 166 + 37, Dover Mall, Toms River, NJ.
3. Principal Contractor: Ocean Monmouth Construction Tel. (201) 349-2710
   Address: (Same as above)
   Lic. No. or Builder Reg. No. _____ Federal Emp. No. _____
4. Architect or Engineer: Gene Wright Tel. (201) 286-1155
   Address: Route 166+37, Dover Mall, Toms River, N.J.
5. Responsible Person in Charge of Work: Jack Tracy Tel. (201) 349-8995

701

II. PROPOSED WORK

A. TYPE OF WORK

1. ☐ Minor Work (Single Trade)
2. ☐ Small Job ($5,000 and no Prior Approvals)
   Complete only II.B., III and IV.A. and Page 2
3. ☐ New Building
4. ☐ Addition
5. ☒ Alteration & C/O
6. ☐ Repair, Replacement
7. ☐ Demolition
8. ☐ Other:

B. CATEGORIES OF WORK

Permit/Category		Estimated
1. ☒	Building/ Structural	$ 30,000.00
2. ☐	Plumbing	
3. ☒	Electrical	
4. ☐	Fire Protection	
5. ☐	Other _____	
6. ☐	Other _____	
	TOTAL COST	$ 30,000

C. DO YOU WANT:

1. ☒ Partial Releases
2. ☐ Prototype Processing

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

1. ☐ Elevators/Dumbwaiters
2. ☐ High-Pressure Boilers
3. ☐ Refrigeration Systems
4. ☐ Pressure Vessels
5. ☐ Hazardous Uses/Places of Assembly
6. ☐ Cross-connections/ Backflow Preventors
7. ☐ Sprinklers
8. ☐ Smoke Control Systems in Open Wells

7,8,15,16

III. DESCRIPTION OF BUILDING USE (USE GROUPS)

A. RESIDENTIAL

1. ☐ Hotels (R–1)
2. ☐ Multi-Family (R–2)
   HMD Reg. No.: _____
3. ☐ Two Family (R–3b)
4. ☐ One-Family (R–3a)

If new construction, enter no. of dwelling units _____

If other than new construction, enter no. of dwelling units:
Before Construction: _____
After Construction: _____
Net Gain (or loss): _____

B. NON-RESIDENTIAL

5. ☐ Theatres with Stage (A–1–A)
6. ☐ Movie Theatres (A–1–B)
7. ☐ Night Clubs (A–2)
8. ☒ Restaurants, Libraries, Museums (A–3)
9. ☐ Religious Assembly (A–4)
10. ☐ Outdoor Assembly (A–5)
11. ☐ Business (B)
12. ☐ Educational (E)
13. ☐ Moderate-Hazard Factory (F–1)
14. ☐ Low-Hazard Factory (F–2)
15. ☐ High-Hazard (H)
16. ☐ Institutional Detention Center (I–1)
17. ☐ Hospitals, Infirmaries (I–2)
18. ☐ Group Homes (I–3)
19. ☒ Mercantile (M)
20. ☐ Moderate-Hazard Warehouse (S–1)
21. ☐ Low-Hazard Warehouse (S–2)
22. ☐ Temporary, Misc. (U)
23. ☐ Other _____

State Specific Use: Liquor store bag/rest.

If Change in Use Group, Indicate Former: _____

IV. BUILDING CHARACTERISTICS

A. OWNERSHIP

1. ☐ Private (Individual, Corp., Non-profit Inst., Etc.)
2. ☐ Public (State, County or Local Govt.)

B. HEATING FUEL

	Principal	Secondary	Type
3.	☐	☐	Gas
4.	☐	☐	Oil
5	☐	☐	Electric
6.	☐	☐	Solid (Wood, Coal, Etc.)
7.	☐	☐	Propane
8.	☐	☐	Solar
9.	☐	☐	Other _____

C. TYPE OF SEWAGE DISPOSAL

10. ☐ Public or Private Company
11. ☐ Private (Septic Tank, Etc.)

D. TYPE OF WATER SUPPLY

12. ☐ Public or Private Company
13. ☐ Private (Well, Etc.)

E. BUILDING CHARACTERISTICS

14. No. of Stories 1
15. Height of Structure _____ Ft.
16. Area–Largest Floor _____ Sq. Ft.
17. Bldg. Area–All Fls. _____ Sq. Ft.
18. Volume of Structure _____ Cu. Ft.
19. Total Land Area Disturbed _____ Sq. Ft.

LDS BR 10312165

CERTIFICATION IN LIEU OF OATH

I. OWNER SECTION

I hereby certify that I am the owner of the property listed on Page 1. This dwelling is to be occupied by myself and is not to be used for any purpose, other than single family residential use.

A. ☐ I further certify that I prepared the plans submitted. This statement is made in accordance with the New Jersey Uniform Construction Code, N.J.A.C. 5:23-2.15(e)vii.

B. ☐ I further certify that I will perform the work below.

B1. ☐ Building B2. ☐ Electrical B3. ☐ Plumbing

C. ☐ I further certify that a new home will be constructed on this property, for my use and occupancy. I attest that all design, construction, plumbing, or electrical work will be done by me or by subcontractors under my supervision, in accordance with all applicable laws; and further acknowledge that said new home is not covered under the New Home Warranty and Builders Registration Act (N.J.A.C. 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.

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

SIGNATURE _____ DATE _____

II. AGENT SECTION

I hereby certify that the work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

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 John Tracy TEL.(201) 349-8985

ADDRESS c/o Routes 166 & 37, Dover Mall, Toms River

SIGNATURE

BLOCK NO. 701 LOT NO. 7, 8, 15, 16 SUBDIVISION _____ PERMIT NO. 5411

PRIOR APPROVALS CHECKLIST

APPROVALS	LOCAL				COUNTY				REGIONAL				STATE				COMMENTS
	Prelim. Approval		Final Approval		Prelim. Approval		Final Approval		Prelim. Approval		Final Approval		Prelim. Approval		Final Approval		
	Init.	Date	Init.	Date	Init.	Date	Init.	Date	Init.	Date	Init.	Date	Init.	Date	Init.	Date	
☐ Planning Board																	
☐ Zoning Board																	
☐ Sewer Authority																	
☐ Water Authority																	
☐ Fire Department																	
☐ Police Department																	
☐ Health Department																	
☐ Soil Conservation																	
☐ N.J. Dept. of Community Affairs																	
☐ N.J. Dept. of Transportation																	
☐ N.J. Dept. of Environmental Protection																	
☐ Other: _____																	
☐ _____																	
☐ _____																	
☐ _____																	
☐ _____																	
☐ _____																	
☐ _____																	

SUBCODES AND SPECIAL REGULATIONS APPLICABLE:

	EDITION OF CODE		EDITION OF CODE		
☐ One and Two Family Dwellings	_____	☐ Mechanical	_____	☐ Flood Hazard	_____
☐ Building	_____	☐ Energy	_____	☐ As Built Elevation Certification	_____
☐ Electrical	_____	☐ Barrier Free	_____	☐ Other	_____
☐ Plumbing	_____	☐ Other	_____		_____
☐ Fire Protection					

PERMIT CONTROL

I. PLAN REVIEW STATUS

Updated at time of receipt of drawings and when plans are approved.

☐ PARTIAL RELEASES
☐ PROTOTYPE PLAN — FILE LOCATION AND NO.

Plan Review Required	Type of Work	Plans Received By Date	Receiver	Approval Date	Reviewer	Comments
☐	BUILDING	8-17-89		8-29-89		
	Footings/Foundations					
	Framing					
	Architectural					
	Other					
☒	PLUMBING			8/29/89		
☐	ELECTRICAL					
☐	FIRE PROTECTION			9-18-89		
☐	OTHER					

C/C ✓

II. PERMIT/INSPECTION STATUS

Updated at time of permit and after final approvals.

Issue Date	Category	Revisions			Final Inspection	Comments
	ALL CONSTRUCTION					
✓	BUILDING				3-29-90	WS
	Footings/Foundations					
	Framing					
	Architectural					
	Other					
✓	PLUMBING				3-29-90	JAH
✓	ELECTRICAL				3-29-90	
	FIRE PROTECTION				3-30-90 / 4-2-90	letter rec'd.
	OTHER					

III. CERTIFICATES ISSUED

CERTIFICATES TO BE ISSUED: SITE	Date Issued
☑ Temporary Certificate of Occupancy — Date Expired 5/2/90	4-2-90
☐ Temporary Certificate of Occupancy — Date Expired	
☑ Certificate of Occupancy — No. 5411	5-7-90
☐ Certificate of Continued Occupancy — No.	
☐ Certificate of Approval — No.	
☐ None	

IV. ON-GOING INSPECTIONS

On-going Inspections Required (See Page 1, II.D.)	Date Posted to Log and Tickler

V. FEE SUMMARY

Initial fee collection recorded in A; all others in section B.

A. COLLECTED AT TIME OF CONSTRUCTION PERMIT ISSUANCE

	AMOUNT
BUILDING	$225.00
PLUMBING	135.00
ELECTRICAL	.
FIRE PROTECTION	40.—
OTHER	.
SUBTOTAL	$400.—
— LESS: 20% of subtotal (when plan review performed by state agency).	(5.—)
D.C.A. TRAINING FEE .0006 x	.
CERTIFICATE OF OCCUPANCY	20.—
OTHER	.
OTHER	.
TOTAL COLLECTED WHEN PERMIT ISSUED	$425—

DATE 9/14/89 Collected By

B. COLLECTED AFTER CONSTRUCTION PERMIT ISSUANCE

	Date	Collected By	AMOUNT
CERTIFICATE OF OCCUPANCY			.
OTHER			.
OTHER			.
— LESS: Refunds			(.)
TOTAL COLLECTED AFTER PERMIT ISSUED			$.

C. TOTAL CONSTRUCTION FEES COLLECTED

	AMOUNT
COLLECTED WITH PERMIT (VA)	$.
COLLECTED AFTER PERMIT (VB)	.
TOTAL	$.

U.C.C. Form F-100 (8/83)

CERTIFICATE

Date Issued 5-7-90
Control #
Permit # 5411

"Spirits Unlimited"

IDENTIFICATION

Block 701 Lot 7,8, 15, 16
Work Site Location Rt. 70 & Chambersbridge Rd.

Owner in Fee B.C. Restaurant of Bricktown, Inc.
Address Rt. 166 and 37, Dover Mall
Toms River, NJ
Tele. ( )
Contractor Ocean Monmouth Construction
Address
Tele. ( )
Lic. No. or Bldrs. Reg. No.
Federal Emp. No.
or Social Security No.

Home Warranty No. none
Use Group M 3½ hours
Maximum Live Load
Description of Work/Use:

Liquor store with bar and snack bar

Type of Warranty Plan: [ ] **State** [ ] **Private**
Construction Classification
Maximum Occupancy Load

CERTIFICATE OF OCCUPANCY/APPROVAL

XX☐ **CERTIFICATE OF OCCUPANCY** ☐ **CERTIFICATE OF APPROVAL**

This serves notice that said building, structure, or equipment has been constructed or installed in accordance with the New Jersey Uniform Construction Code, and is approved for use and/or occupancy.

☐ **CERTIFICATE OF CONTINUED OCCUPANCY**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

☐ **TEMPORARY CERTIFICATE OF OCCUPANCY**

If this is a Temporary Certificate of Occupancy the following conditions must be met no later than _____, 19____ or the owner will be subject to a fine or order to vacate:

Arthur J. Ciarzo
CONSTRUCTION OFFICIAL

Fee $
Paid [ ] Check No.
Collected by:

U.C.C. Form F-260A

1 WHITE—APPLICANT 2 CANARY—OFFICE 3 PINK—TAX ASSESSOR

CERTIFICATE

Date Issued April 2, 1990
Control #
Permit # 5411

IDENTIFICATION

Block 701 Lot 7,8,15,16
Work Site Location Rt. 70 & Chambers Bridge Rd.

Owner in Fee B. C. Restaurant of Bricktown, Inc.
Address Rt. 166 and 37, Dover Mall
Toms River, NJ
Tele. ( )
Contractor Ocean Monmouth Construction
Address
Tele. ( )
Lic. No. or Bldrs. Reg. No.
Federal Emp.. No.
or Social Security No.

Home Warrantly No. none
Use Group M - 3 hours
Maximum Live Load
Description of Work/Use:

Liquor store with bar and snack bar

Type of Warranty Plan: [ ] **State** [ ] **Private**
Construction Classification
Maximum Occupancy Load

CERTIFICATE OF OCCUPANCY/APPROVAL

☐ **CERTIFICATE OF OCCUPANCY** ☐ **CERTIFICATE OF APPROVAL**

This serves notice that said building, structure, or equipment has been constructed or installed in accordance with the New Jersey Uniform Construction Code, and is approved for use and/or occupancy.

☐ **CERTIFICATE OF CONTINUED OCCUPANCY**

This serves notice that based on a general inspection of the visible parts of the building there are no imminent hazards and the building is approved for continued occupancy.

XX ☒ **TEMPORARY CERTIFICATE OF OCCUPANCY**

If this is a Temporary Certificate of Occupancy the following conditions must be met no later than May 2, 19 90 or the owner will be subject to a fine or order to vacate: Until completion of site. (Engineering and final inspectinns of entire site)

Arthur J. Cadge
CONSTRUCTION OFFICIAL

Fee $
Paid [ ] Check No.
Collected by:

U.C.C. Form F-260A

1 WHITE—APPLICANT 2 CANARY—OFFICE 3 PINK—TAX ASSESSOR

CONSTRUCTION PERMIT

NEW JERSEY UNIFORM CONSTRUCTION CODE

Date Issued 9/19/89
Control #
Permit # 5411

IDENTIFICATION Block 701 Lot 7, 8, 15, 16

Work Site Location Route 70 & Manasquan Bridge

Contractor Ocean Monmouth Const

Address

Owner in Fee N.J. Dept. of Trans.

Address Same

Tele. ( )

Tele. ( )

Lic. No. or Bldrs. Reg. No. Exp. Date

Federal Emp. No.
or Social Security No.

is hereby granted permission to perform the following work:

[✓] BUILDING [✓] PLUMBING [ ] OTHER
[ ] ELECTRICAL [✓] FIRE PROTECTION

DESCRIPTION OF WORK: Comml Alteration & c/o

PAYMENTS (Office Use Only)		**0004** 5411**	
Building	225 -	CHECK	0.00
Plumbing	135	701 #	
Electrical			0.00
Fire Protection	40 -	7 #	
Other		BUILDING	225.00
Other	P/R	PLUMBING	135.00
DCA Training Fee		FIRE	40.00
Cert. of Occ.	5	PLAN RVW	5.00
Other			20.00
Total	425	TOTAL	425.00
Check No. ✓	1699	CHECK	425.00
Cash			
Collected By:			

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 $ 20,170 -

CONSTRUCTION OFFICIAL

U.C.C. Form F-170A

1 WHITE - OFFICE 2 CANARY - TAX ASSESSER 3 PINK - JACKET 4 GOLD - APPLICANT

BUILDING SUBCODE TECHNICAL SECTION

PERMIT NO. 32-6-89
DATE ISSUED 2-15-89
REVISION DATE

Block 701 Lot 7,8,15,16
Subdivision Shop Rite Ctr.

A. IDENTIFICATION

APPLICANT – *Complete unshaded areas only* When changing contractors, notify this office

Owner B.C. Rest. of Brick Town Inc. Contractor Ocean Monmouth Constr.
Address Rts 166+37, Dover Mall Address Rts 166+37, Dover Mall
Toms River, N.J. 08753 Toms River, NJ 08753
Tel. (201) 349-2710 Tel. (201) 349-2710
Work Site Address Cor. Rte 70 + Lic. No.
Chambersbridge Rd, Shop Rite Ctr. Federal Emp. No.

CERTIFICATION IN LIEU OF OATH:

(Complete for Minor Work and Small Job Only)

I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

AGENT SIGNATURE

B. TECHNICAL SITE DATA

DESCRIPTION OF WORK

Give detail description including materials used, dimensions, etc.

Completion of tenant space in new building (see plans)

☒ See Plans

TYPE OF WORK:

- ☐ New Building
- ☐ Addition
- ☒ Alteration/Renovation
  - ☐ Roofing
  - ☐ Siding
  - ☐ Other
- ☐ Demolition
- ☐ Miscellaneous
  - ☐ Fence
  - ☐ Sign
  - ☐ Pool
  - ☐ Elevator
  - ☐ Other

Fee Basis	Fee
	$
SUBTOTAL	$
Minimum Building Fee (if applicable)	$
Total Building Fee *(Greater of Minimum or Subtotal)*	$

C. BUILDING CHARACTERISTICS

USE GROUP: ~~A-3~~, M Present _____ Proposed

No. of Stories 1 Total Building Area–All Floors _____ Sq. Ft.

Height of Structure _____ Ft. Volume of Structure _____ Cu. Ft.

Area–Largest Floor _____ Sq. Ft. Total Land Area Disturbed _____ Sq. Ft.

Estimated Cost of Building Work: $ _____

D. COMMENTS

☒ Partial Releases ☐ Prototype Processing

PLAN REVIEW AND INSPECTION — BUILDING

DATE	JOB CONDITION/COMMENTS

Fire Grading: Maximum Live Load: Maximum Occupancy Load:

JOB SUMMARY

PLAN REVIEW

	Date	Initials
☐ No Plans Required		
☒ All	8-29-89	1601
☐ Footing/Foundation		
☐ Frame		
☐ Architectural		
☐ Other		

INSPECTIONS FINAL

☐ CO ☐ CCO ☐ CA

Date: 3-29-90

Inspected By: Lutts

INSPECTIONS

Type	Failure Dates			Approval Date
☐ Footing/Foundation				
☐ Slab				
☒ Frame				11-20-89 Lutts
☐ Architectural				
☐ Insulation	1800 Hours			
☒ Finishes				3-29-90 Lutts
☐ Energy				
☐ Mechanical				
☐ TCO				
☐ Other				

U.C.C. Form F-110 (8/83)

TOWNSHIP OF BRICK

FIRE SUBCODE
TECHNICAL SECTION

PERMIT NO. 5411
DATE ISSUED 9-19-89
REVISION DATE
Block 701 Lot 78.15.16
Subdivision Shoprite Ctr

A. IDENTIFICATION

APPLICANT – *Complete unshaded areas only* When changing contractors, notify this office

Owner B.C. Rest of Brick Town Inc
Address Cor 166+37, Dover Mall
Toms River, N.J. 08753
Tel. (201) 349-2710
Work Site Address Cor Rte 70 + Chambersbridge
Shop Rite Center

Contractor
Address
Tel. ( )
Lic. No.
Federal Emp. No.

CERTIFICATION IN LIEU OF OATH:
(Complete for Minor Work and Small Job Only)

I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

AGENT SIGNATURE

B. TECHNICAL SITE DATA

B1. SPRINKLERS

TYPE: ☒ Wet ☐ Dry ☐ Other _____ FEE
Area Sprinkled: ☒ Full ☐ Partial (specify in comments)
No. of Heads: _____ No. of Spare Heads: _____
☐ Valves Supervised – Method: _____
Water Supply – Source: _____ Size: _____
FD Connection Location: Permit from entire bldg
Estimated Cost of Work: $ 18 $ _____

B2. SPECIAL SUPPRESSION SYSTEMS

TYPE: ☐ Dry Chemical ☐ CO_2 ☐ Halon ☐ Foam ☐ Other _____
Manual Pull: ☐ Yes ☐ No
Locations: _____
Estimated Cost of Work: $ _____ $ _____

B3. ALARM

TYPE: ☐ Manual ☐ Automatic FEE
Supervision Type: ☐ Local ☐ Central ☐ Proprietary ☐ Remote Location
Estimated Cost of Work: $ _____ $ _____

B4. STAND PIPES

Pipe Size: _____ Pump Size: _____
Water Source: _____ Size: _____
FD Connection Location: _____
Hose Station: ☐ Yes ☐ No
Estimated Cost of Work: $ _____ $ _____

B5. OTHER

Negelo Suppression Syst & permit $ _____
& Plans. gas Cooking Asbestos. $ _____
Hood & Exhaust. $ _____

Subtotal $ _____
Minimum Fire Protection Fee (If Applicable) $ _____
Total Fire Protection Fee (*Greater of Minimum or Subtotal*) $ 40

C. FIRE PROTECTION CHARACTERISTICS

USE GROUP _____ Present _____ Proposed
Heating Systems – Location: _____
Type: ☐ Gas ☐ Oil ☐ Electrical ☐ Solar ☐ Other _____
Fuel Storage Tank – Location: _____ Fuel Type: _____ Capacity: _____
Total Estimated Cost of Fire Protection Work: $ _____

D. COMMENTS

☐ Partial Releases ☐ Prototype Processing

PLAN REVIEW AND INSPECTION — FIRE

DATE	JOB CONDITION/COMMENTS
9/18/89	needs permit taken out for Suppression
	Syst over Cooking area & Exhaust
3-26-90	(1) needs Letter on Fire Rated on Rug on wall
	(2) two Emergency lites not working OK JE
	(3) E Occupancy Posted needed. OK JE
	(4) Remove Carpet from Around Bar as ~~[illegible]~~
	Decoration No Fire Rating on Carpet
	put up on Walls & Flame Spread is
	Very high. I do not ~~ok~~ recommend
	a T.C.O Till this is abated. or
	a letter from Arch. say Carpet is Radent
	Flex Class I ~~[illegible]~~ Carpet.
4-2-90	Received Letter & Radent Flex att to
	this Card OK

JOB SUMMARY

☐ No Plans Required
☐ Plan Review Approved

Date: 9/18/89

Approved By: JE

INSPECTIONS FINAL

☒ CO ☐ CCO ☐ CA

Date: 4-2-90

Inspected By: JE

INSPECTIONS

Type	Failure Date			Approval Date
☐ Fire Suppression Test				
☐ Fire Alarm Test				
☒ Smoke Test				4-2-90
☐ TCO				
☒ Other Final	3-26-90			4-2-90
☐ Other				
☐ Other				
☐ Other				

U.C.C. Form F-140 (8/83)

, TOWNSHIP OF BRICK

PLUMBING SUBCODE TECHNICAL SECTION

PERMIT NO. 5411
DATE ISSUED 9-19-89
REVISION DATE
Block 701 Lot 7.8.15.16
Subdivision Shop Rite Ctr

A. IDENTIFICATION

APPLICANT — *Complete unshaded areas only* When changing contractors, notify this office

Owner B.C. Rest. of Brick Township Inc. Contractor PINELAND PLBG. & HTG., INC.
Address Rt 166+37 Dover Mall Address 807 MANTOLOKING RD.
Toms River, N.J. 08753 BRICK TOWNSHIP, N.J. 08723
Tel. (201) 349-2710 Tel. (___) 201 477-0854
Work Site Address Cor Rt 70+Chambersbridge Lic.No./Bus. Permit 1722
Shop Rite Center Federal Emp. No. 22-1853417

CERTIFICATION IN LIEU OF OATH:
(Complete for Minor Work and Small Job Only)

I hereby certify that the proposed work is authorized by the owner of record and I have been authorized by the owner to make this application as his agent.

William R. Dwyer
AGENT SIGNATURE

B. TECHNICAL SITE DATA

List all fixtures

TYPE OF WORK: New

No.	Fixture	Fee	No.	Fixture	Fee
2	Water Closet/~~Bidet~~	$ 10.-		Garbage Disposal	$
	Bathtub			Air Conditioner Unit	
5 (2)	Lavatory/Sink (3)	25.-	4	Indirect Connection	30.-
5	~~Shower~~/Floor Drain	25.-		Sewer Ejector	
	Washing Machine		1	Grease Trap	35.-
	Dishwasher			Interceptor	
	Commercial Dishwasher			Backflow Device	
1	Water Heater	5.-		Reduced Pressure Backflow Device	
	Domestic Boiler/ Furnace		1	Vent Stack	10.-
	Steam Boiler			Solar System	
	Water Util. Connection			Other GAS PIPING	15.-
	Sewer Util. Connection			Other	
	Hose Bibb			Other	
	Water Cooler			Other	
	COLUMN 1	$ 65.-		COLUMN 2	$ 70.-

Fee	
COLUMN 1	$ 65.-
COLUMN 2	$ 70.-
SUBTOTAL	$
Minimum Plumbing Fee (if applicable)	$
Total Plumbing Fee *(Greater of Minimum or Subtotal)*	$ 135.-

C. PLUMBING CHARACTERISTICS

USE GROUP: Store Present ___ Proposed

Drainage — Material Sch 40 PVC Size 1½-4
Building Sewer — Material ___ Size ___
Water Service — Material ___ Size ___
Venting — Material Sch 40 Size 1½-4

Estimated Cost of Plumbing Work: $ ___

D. COMMENTS

☐ Partial Releases ☐ Prototype Processing

PLAN REVIEW AND INSPECTION – PLUMBING

DATE	JOB CONDITION/COMMENTS
3-28-90	meter/gate OK call BTMUA UPH

JOB SUMMARY

☐ No Plans Required
☒ Plan Review Approved
Date: 8-28-89
Approved By: [signature]

INSPECTIONS FINAL

☒ CO ☐ CCO ☐ CA
Date: 3-29-30
Inspected By: [signature]

INSPECTIONS

Type	Failure Dates			Approval Date
☐ Slab				
☒ Rough				12-20-89
☐ Water				
☐ Sewer				
☐ Energy				
☐ Mechanical				
☐ TCO				
☐ Other				

U.C.C. Form F-130 (8/83)

SPIRITS

CUT-IN-CARD

MUNICIPALITY BT

LOCATION Rt. 70 + Chambers Bridge UTILITY CO PP

Caldor Plaza BLK 701 LOT 7-16

OWNER B.C Rest. of Brick OCCUPANT

"Installation in the above premises has been inspected and is in accordance with N.E.C, utility and DCA requirements."

☒ FINAL ☐ TEMPORARY This approval void after _____ days

SERVICE 200A RANGE _____ WATER HEATER _____

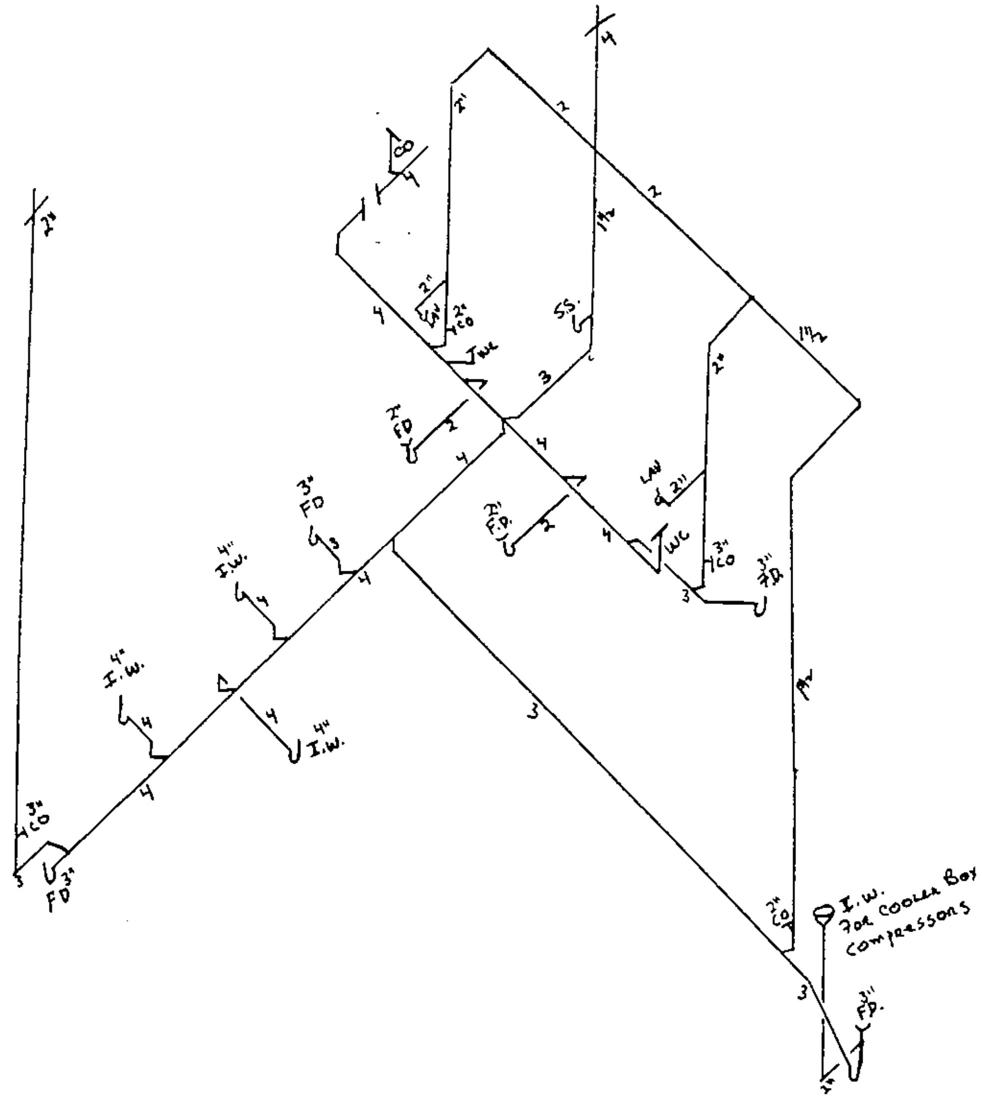
AIR COND X ELECT HEAT _____ MISC _____

COMMENTS _____

DATE 900329 PERMIT # 11867 INSPECTOR J. Dutton

Insp. Lic# 2483

Elec. 104


3" CO
3" FD
4" I.W.
4" I.W.
4" I.W.
3" FD
2" FD
2" FD
WC
WC
LAV
2"
SS.
3" CO
3" FD
2" CO
I.W.
For Cooler Box
Compressors
3" FD.
CO

The Lederer & Wright Partnership

Eugene D. Wright Jr., AIA, PP
Dover Mall
Routes 166 & 37
P.O. Box F
Toms River, NJ 08754-0330

Arthur J. Cierzo
Construction Official
Brick Township Building Department
Brick Township Municipal Building
401 Chambers Bridge Road
Brick Township, NJ 08723

architects planners consultants

The Lederer & Wright Partnership

John J. Lederer, AIA
53 Mount St.
Bay Head, NJ 08742
201.892.0020

Eugene D. Wright Jr., AIA, PP
Dover Mall
Routes 166 & 37
P.O. Box F
Toms River, NJ 08754-0330
201.286.1155

October 20, 1989

Arthur J. Cierzo
Construction Official
Brick Township Building Department
Brick Township Municipal Building
401 Chambers Bridge Road
Brick Township, NJ 08723

RE: Spirits Unlimited
Bricktown Centre
Project # TR8915

Dear Mr. Cierzo

This letter is to acknowledge that the Owner leasing tenant space at the above captioned location has decided to modify the 'stick-built' framing system which supports the mezzanine by providing a prefabricated framed deck system. This new arrangement should be of the same plan configuration. All loading, stair egress, and other applicable code criteria must be satisfied by the manufacturer. It is my understanding that signed & sealed shop drawings from a Professional Engineer will be provided by same.

If you any questions, I can be contacted after October 29, at my office.

Thank you.

Very Truly Yours,

Eugene D. Wright Jr., A.I.A., P.P.

Copies: Jack Tracey

The Lederer & Wright Partnership

John J. Lederer, AIA
53 Mount St.
Bay Head, NJ 08742
201•892•0020

Eugene D. Wright Jr., AIA, PP
Dover Mall
Routes 166 & 37
P.O. Box F
Toms River, NJ 08754-0330
201•286•1155

March 29, 1990

Brick Township Building Department
Brick Township Municipal Building
401 Chambers Bridge Road
Brick, NJ 08723

RE: Spirits Unlimited
Bricktown Centre
Brick, NJ
Project # TR8915

Gentlemen:

The occupancy load for the above captioned project shall be 75, which includes 30 bar stools.

If you have any questions or comments, please contact my Toms River office.

Thank you.

Sincerely,

Eugene D. Wright Jr., A.I.A., P.P.

The Lederer & Wright Partnership

John J. Lederer, AIA
53 Mount St.
Bay Head, NJ 08742
201•892•0020

Eugene D. Wright Jr., AIA, PP
Dover Mall
Routes 166 & 37
P.O. Box F
Toms River, NJ 08754-0330
201•286•1155

March 30, 1990

Joseph Evaristo
Brick Township Building Department
Brick Township Municipal Building
401 Chambers Bridge Road
Brick, NJ 08732

RE: Spirits Unlimited
Bricktown Centre
Brick, NJ
Project # TR8915

Dear Mr. Evaristo:

As per our telephone conversation this morning, this is to inform you that the carpet installed on the vertical bar surface is 'Maxim/Actionbac' carpet from 'Wellco Business Carpet'. A copy of the carpet specifications is enclosed under this cover. Your attention should be directed to critical radiant flux value of .45 in accordance with ASTM E648 which qualifies it as Class I. Additional the NBS smoke chamber value is 149.

If you have any questions or comments, please call me at the Toms River office.

Thank you.

Sincerely,

Eugene D. Wright Jr., A.I.A., P.P.

copies: Donato D'Onofrio

enclosure

Wellco
Business Carpet
a mannington mills company

To Whom It May Concern:

RE: MAXIM/ActionBac

This letter will act as certification that Wellco Business Carpet has submitted for flammability test our carpet style MAXIM/ActionBac.

This test was conducted in accordance with requirements set forth in ASTM-E-648 testing specifications, and this style has successfully passed the test. The results are as follows:

CRITICAL RADIANT FLUX: .45 (Class I)

This style was also tested in accordance with ASTM-E-662 testing procedure for the N.B.S. Smoke Chamber. The results are as follows:

N.B.S. SMOKE CHAMBER #: 149

Should you require additional information, please do not hesitate to contact me.

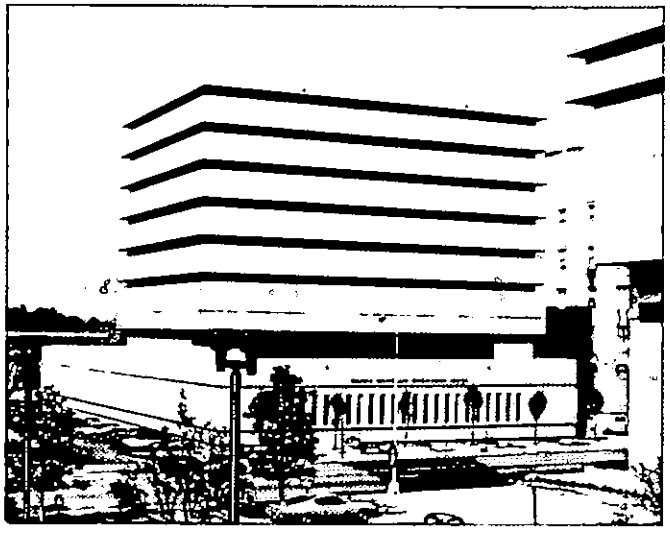
Sincerely,

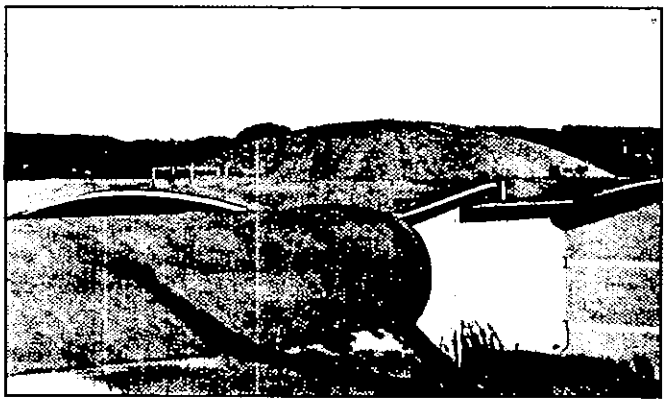
WELLCO BUSINESS CARPET

Lori Ehrhardt

Lori Ehrhardt
Technical Services Representative

jp/th2





7.14/No

NCFI

RIGID FOAM-IN-PLACE URETHANE INSULATION

MR/manufacturer

North Carolina Foam Industries is a formulator of foamed-in-place rigid urethane foam systems. NCFI manufactures liquid foam systems for distribution in drums to insulation and roofing contractors for on-site foamed-in-place application. NCFI also sells and services Gusmer foamed-in-place equipment. This gives the contractor one source for his foam needs.

NCFI was organized in 1964 by Dr. H. W. Bradley, a research chemist, and Barnhardt Manufacturing Company, a leading manufacturer of fiber cushioning materials whose founding dates back to 1900. Soon after its organization NCFI had earned a reputation as a quality manufacturer of flexible urethane foams for the furniture and bedding industry.

In 1967 NCFI began formulating rigid urethane foam systems for cold storage insulation. The use of rigid urethane foam insulation has grown from cold storage to many other uses. NCFI's service to the insulation and roofing industries is backed by an accumulation of foam know-how going back over 20 years to the pioneer days of urethane.

DT/document

This catalog is intended to serve as a guide for specifying NCFI foam-in-place urethane insulation in commercial and institutional buildings. Specifications for applications not covered in this catalog are available on request.

UA/uses, applications

- Wall Insulation
- Roof Insulation
- Duct Insulation
- Tank Insulation

NCFI RIGID FOAM-IN-PLACE URETHANE INSULATION

PP/product presentation

what it is . . .

Rigid urethane foam is an insulating material formed by two chemical components. The liquid components meet and mix at a spray gun. The material expands in a matter of seconds and within minutes of its application becomes rigid. The superior insulating abillty of urethane is due to the presence of fluorocarbon vapor trapped in millions of tiny cells.

what it offers . . .

Double Insulation Efficiency
Other materials require twice the thickness for the same insulation.

Seamless Efficiency
Sprayed foam creates a monolithic coat which has less heat loss than jointed insulation.

Self-Adhering
Sprayed urethane foam self adheres to clean dry surfaces.

how it must be protected . . .

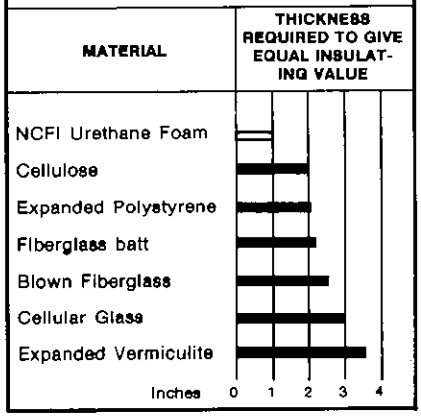
On interior building surfaces it must be covered with ½ in. of plaster or an equivalent 15 min. fire resistive material for fire protection.

On roofs and exterior surfaces it must be coated for protection from sun and weather.

For more detail on above see application information on individual systems.

TABLE 1

Comparison of Thermal Efficiency



OP/overall product

NCFI foamed-in-place urethane insulation has been classified by Underwriters' Laboratories Inc. to assure it conforming with building code requirements. Note Table 4 & Table 2 for different classifications.

The ability to spray NCFI urethane foam completely over the interior wall or exterior roof of a building gives it an advantage over all other types of insulation. NCFI foam will fill all cracks and voids around windows and doors to give a wall a complete monolithic seal. Due to its high efficiency the thickness of walls can be kept the same as in the past, or reduced, yet offer better energy saving insulation.

Due to NCFI sprayed urethanes self-conforming and self-adhering properties it is a natural for insulating curved roofs or domes. Because it can be quickly applied it can seal a roof deck and stop its movement at an early time during construction. NCFI sprayed urethane makes an excellent base for the new elastic liquid roof coatings, and the combination of sprayed urethane with the new elastic liquid coatings makes roofs that do not split and crack with the difference in summer and winter temperature extremes. The monolithic foamed-in-place sprayed urethane protects the roof deck from these same temperature extremes.

There are many insulation contractors that are familiar with NCFI spray-in-place urethane foam. NCFI will be glad to guide you to several applicators in any geographical area.

TABLE 2

Underwriters Laboratories Inc. classification of NCFI 225

Results of ASTM E-84 on finished foam applied to asbestos cement board

	2 In.	4 In.
Flame Spread*	25	25
Smoke Developed	250-350	350-400

*This numerical flame spread rating is not intended to reflect hazards presented by this or any other material under actual fire conditions. For proper use refer to NCFI 225 application information and any of the following codes or guides.

1. Southern Standard Building Code, Section 718 (1982 Revision 1983 Amended).
2. BOCA Basic Building Code, Section 1319.0.
3. NFPA No. 205 M-T "Guide for Plastics in Construction".

TABLE 3

Typical Thermal Characteristics of NCFI Urethane Foam k factor = .14*

Thickness	R value	C value
½ inch	3.57	.280
¾ inch	5.36	.187
1 inch	7.14	.140
1¼ inches	8.93	.112
1½ inches	10.71	.093
2 inches	14.28	.070
3 inches	21.42	.047
4 inches	28.56	.035

*As with all insulating materials, the k factor will vary with age and use conditions.

TABLE 4

Typical Physical Properties of NCFI Rigid Urethane Foam (See 1 below)	NCFI 225	NCFI 583
Core density, pcf	1.9	2.8
k-factor (BTU in./hr. ft² °F) (see Table 3)	.14	.14
Compressive Strength, psi	25	60
Moisture Vapor Transmission, perm in.	2-3	2-3
Max. Service Temperature, °F	225	225
Underwriters Laboratories Classification	classified for interior use (See Table 2 above)	classified for exterior use (See 2 below)

1. Listed in this table are only two of many NCFI foams. Physical properties of our other foams are readily available.
2. NCFI 583 has Class A roof covering classification by UL on non-combustible decks with liquid top coatings as specified in UL building materials Index. Also accepted directly over metal deck per UL construction No. 136.

WALLS

The complete seal that spray-in-place foam gives walls has repeatedly shown energy savings exceeding 20 percent over other insulating materials at similar R value.

NCFI Spray System 225 is ideal for the use in wall insulation because of its high efficiency at a minimum thickness and its ability to meet code requirements for smoke development and flame spread. However, fire safety and code requirements make it mandatory for all urethane foam on the interior of the building to be protected by a thermal barrier of 1/2 inch gypsum wall board or other approved material having a finish rating of not less than 15 minutes installed so as to remain in place for the required period of time in the event of fire. Fire stops should be provided between floors in multi-story buildings. Urethane sprayed or poured in masonary cavity walls would meet the above requirement.

The spray-in-place and self-adhering nature of NCFI 225 allows curtain walls in commercial construction to be easily insulated with a minimum of labor. The urethane easily seals around all plumbing and electrical conduit that would normally cause heat loss or gain. On masonry walls NCFI 225 can be sprayed between furring strips that gypsum board is *then nailed to, or* lathe can be placed over the foam and plaster applied directly to the foam and lathe.

Where spray urethane is used on interior masonry cold storage walls (constantly below 32° F) a vapor barrier coating of .05 perms or lower is required on masonry prior to the foaming.

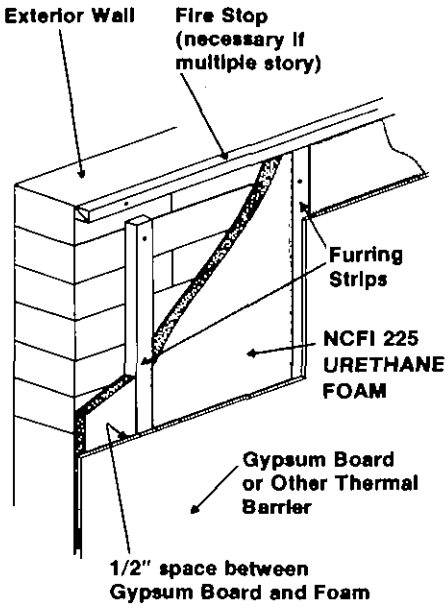
ROOFS

NCFI spray urethane foam has repeatedly shown energy savings as a roof insulation. In addition to the energy savings NCFI foam insulates the roof deck from the heat of the sun and chill of ice keeping its movement to a minimum, therefore, avoiding splits in the roof. NCFI foam is an excellent base for the pliable liquid roof coatings allowing them a clean surface for adherance. The pliable liquid roof coverings must be applied to the foam on exterior application to protect the foam from direct sunlight which causes dusting and discoloration.

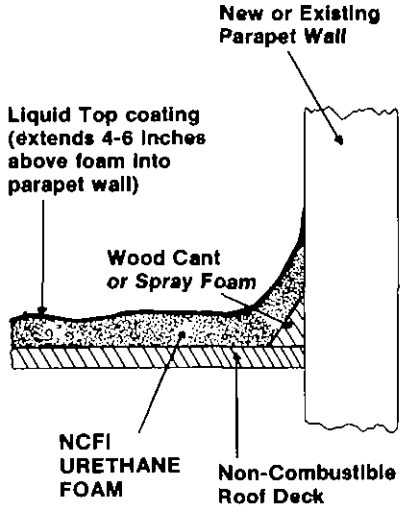
The self-flashing nature of the combination of sprayed urethane and liquid weatherproof coatings give a economical solution to the problem of sealing around penetrations in roofs for air handling equipment and vents. The self-conforming ability of NCFI sprayed urethane and liquid roof coating work ideally on domed and other curved roof surfaces.

Over non-combustible roof decks NCFI 583 has Class A roof covering classification with several different liquid weathercoatings.

WALL DETAIL



ROOF DETAIL



TS/technical support

WALLS - SPECIFICATION

The following specification is a general guide to the experienced architect or specifier for the use of NCFI 225 in wall insulation.

1. GENERAL

1.1 CONTRACTOR RESPONSIBILITIES: *The selection and supervision* of all labor, the furnishing of all materials, tools, and equipment, the adherence to all application instructions as shown on component labels and recommended by NCFI 225 Application Information Sheet, and the quality and performance of the completed job.

1.2 APPLICATOR QUALIFICATION: The spray applicators must be fully qualified in handling and spraying urethane foam and thoroughly experienced in the use of urethane spray equipment.

2. MATERIAL

2.1 Material shall be NCFI 225 - a two component rigid urethane foam, which, when mixed together *in proper proportions* and sprayed in place, produces a nominal 2 lb/cu. ft. density, foam with U. L. classification not to exceed 25 flame spread and 350-400 smoke developed on installed thickness.

3. EXECUTION

3.1 Safety in Application. Due to the irritating nature of the polymeric isocyanate in the "A" component of the 225 system, fresh air supply masks (or other effective respiratory equipment) must be worn by personnel spraying this material. Forced air circulation is recommended in confined areas. Safety goggles shall be worn at all times. For further information refer to NCFI 225 Application Information Sheet.

3.2 Surface Preparation. All surfaces to be sprayed must be dry and free of dew, frost, or moisture. Provide vapor barrier if required. All metal to which foam is to be applied must be free of oil, grease, etc. For optimum adhesion metal surfaces should be primed prior to spraying. Normal metal priming paint is satisfactory.

3.3 NCFI 225 should not be sprayed at a thickness greater than 2 inches in one pass. Thicknesses greater than 2 inches should be built up by applying layers approximately one inch thick. Due to exothermic nature of foam process, heat can build up in interior of foam resulting in loss of physical properties *if above procedure* is not followed.

(continued on next page)

RIGID FOAM-IN-PLACE URETHANE INSULATION

TS/technical support

(continuation of wall)

specifications

3.4 Care should be taken that the foam is sprayed evenly to the proper thickness. The surface of the foam should be reasonably smooth with a slightly pebbled texture and have no spongy or soft areas.

3.5 Sprayed foam shall have a tolerance of ±¼ inch per inch within the limits of the specified minimum thickness.

3.6 The applied foam on interior of building is to be covered with the specified thermal barrier as soon as practical for fire protection.

3.7 No welding or any other type of burning shall be allowed close enough to the sprayed foam to constitute a possible fire hazard.

3.7.1 An operable 15 lb. CO_2 or dry chemical extinguisher shall be provided for each field foaming operation.

ROOFS - SPECIFICATIONS FOR INSULATING NEW ROOFS AND RE-ROOFING.

The following specification is a general guide to the experienced architect or specifier for the use of NCFI 583 for exterior roof insulation.

1. GENERAL

1.1 CONTRACTOR RESPONSIBILITIES: The selection and supervision of all labor, the furnishing of all materials, tools, and equipment, the adherence to all application instructions as shown on component labels and recommended by NCFI 583 Application Information sheet, and the quality and performance of the complete job.

1.2 APPLICATOR QUALIFICATION: The spray applicators must be fully qualified in handling and spraying urethane foam and throughly experienced in the use of urethane spray equipment.

2. MATERIAL

2.1 Material shall be NCFI 583 - a two component rigid urethane foam which when mixed together in proper proportions and sprayed in place produces a nominal 2.8 lb/cu. ft. core density.

2.2 See coating manufacturers specifications for coating to protect foam from weather and for roof covering classification.

3. EXECUTION

3.1 Deck and Surface Preparation for New Roof. All surfaces to be sprayed must be dry and free of dew, frost, or moisture. All metal to which foam is to be applied must be free of oil, grease, rust, etc. Primers should be used where necessary.

3.2 Deck and Surface Preparation for Re-Roofing. Power broom or otherwise remove all loose gravel, dirt, and dust, as may be necessary to create a strong bond between the spray foam and the existing roof. Cut out and patch all existing blisters, punctures, and soft spots in manner recognized by good roofing practices. Properly secure any loose section of the substrate or other items affecting areas to be sprayed. If moisture is suspected in the insulation, install relief vents using a minimum of one to each ten squares of affected roofing. Remove any grease, oil, or other materials that the spray foam will not satisfactorily adhere to.

3.3 For Safety in application see NCFI #583 Application Information sheet.

3.4 All surfaces to receive spray foam shall be dry and free of dew and frost.

3.5 Application of spray foam shall not commence during inclement weather or when precipitation is imminent. When wind velocity exceeds 15 mph spraying should not be attempted without using windshield. Caution should be taken to prevent overspray.

3.6 A minimum of one inch of spray foam shall be applied on re-roof applications. Additional thickness may be required in certain areas or to increase insulation value. Spray foam shall be applied in a uniform thickness over the entire area with tolerance of ±¼ inch except those areas where greater thickness is to be applied for drainage or where a feathered finish is required.

3.7 The finished surface of the applied spray foam shall be free of excessive ridges and bumps and be in a suitable condition to receive the specified protective coating.

3.8 The weather coating shall be applied to the foam as soon as coating manufacturer's specification allow's so as to protect the foam from degradation due to sun and weathering.

---

for more information

CS/coatings, surfacing
CC/code acceptability
AC/availability, cost
OM/operation, maintenance

Call Sweet's BUYLINE for your nearest representative

Or NCFI at 919-789-9161

NCFI

NORTH CAROLINA FOAM INDUSTRIES, INC.

P. O. BOX 1528 • MOUNT AIRY, N. C. 27030

The Lederer & Wright Partnership

John J. Lederer, AIA
53 Mount St.
Bay Head, NJ 08742
201•892•0020

Eugene D. Wright Jr., AIA, PP
Dover Mall
Routes 166 & 37
P.O. Box F
Toms River, NJ 08754-0330
201•286•1155

November 30, 1989

RE: Spirits Unlimited Liquor Store
Bricktown Centre
Brick, NJ

Brick Township Building Department
Brick Township Municipal Building
401 Chambers Bridge Road
Brick, NJ 08723

To Whom It May Concern:

The assembly area at the rear of the liquor store occupied by the bar shall have 30 stools, 10 additional seats for free standing tables, and approximately 2 employees for a total of 42 occupants at this area.

Please call the Toms River office if you have any questions.

Sincerely,

Eugene D. Wright Jr., A.I.A., P.P.

THE BRICK TOWNSHIP
MUNICIPAL UTILITIES AUTHORITY

1551 HIGHWAY 88 WEST
BRICK, NEW JERSEY 08724
458-7000

CERTIFICATE OF COMPLIANCE

Date 4-2-90

NAME Vornado Inc.

ADDRESS 174 Passaic St. Garfield, NJ 07026

PROPERTY LOCATION 670 Hwy. 70 Liquor Store

Account No. G129662 Block 701 Lot 7

I hereby certify that the above applicant has complied with all Rules and Regulations of this Authority and has paid all required fees and charges.

For the Authority

OCEAN COUNTY, NEW JERSEY
401 CHAMBERS BRIDGE ROAD, BRICK, N.J. 08723

9-12-89
Called
Mg Zoning

Sprts

Division of Inspections

A.J. Cierzo,
Construction Official

(201) 477-3000, ext. 26

CHECK LIST

RE: Block 701 Lot 7 & 15 16 Address Rt 70 & Chambersbridge

Please be advised that your application for a construction permit for the subject property has beenrejected due to deficiencies in the following areas:

Administrative

Zoning Needs Site approval (Retail Sales only) No Rest. or Bar

Engineering

Building

Plumbing

Electric

Fire Call fire need more Information

See attached review check list(s) for details as to the reason your submission has been rejected. Please revise your application accordingly and resubmit to this office.

There is a 20 working day time limit for review of all documents submitted with a construction permit application. This time limit ceases in the event of a rejection of any type, and starts over again when the rejection(s) have been corrected and the application resubmitted.

Arthur J. Cierzo,
Construction Official

Date

DWG. #	DATE		WILDECK®
COVER		COVER SHEET	

DESIGN CALCULATIONS

MEZZANINE SYSTEM

FOR

SPIRITS UNLIMITED

WMI #2785

Prepared by

WILDECK MEZZANINES, INC.

Ralph H. Laird

Vice President

PE ILL 25609

CALCULATIONS 1, 3-8
ROOF DECK DATA 2
FLOOR ANCHOR DATA 9-10
SPEC 11
STAIR DETAILS 12,13

Chandra Pranjpa
10/4/89

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	9/25/89		SHEET 1 OF 13

LIVE LOAD	125	PSF
DEAD LOAD	10	PSF
TOTAL LOAD	135	PSF

CHECK ROOF DECK (20 GAUGE - SEE SHEET #2)

MAX. JOIST SPACING — 4.36'

$$f_b = \frac{M}{S} = \frac{wl^2}{8S}$$

$$= \frac{(135)(4.36^2)(12)}{8(.252)}$$

$$= 15,276 \text{ psi}$$

$$15,276 \text{ psi} \leq 20,000 \text{ psi}$$

$$\therefore \text{ OK}$$

CHECK JOISTS - (12C12 - SEE SHEET #3)

$$M_{ACT} = \frac{wl^2}{8}$$

$$= \frac{(135)(4.36)(13.5)^2}{8}$$

$$= 13.41 \text{ K-FT}$$

$M_{ALL} = 15.55$ K-FT

$$13.41 \text{ K-FT} \leq 15.55 \text{ K-FT}$$

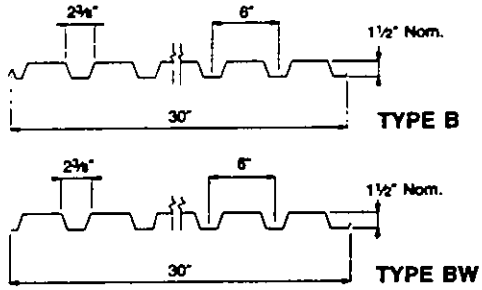
$$\therefore \text{ OK}$$

DWG. #	DATE		WILDECK®
2785	9/25/89	SPIRITS UNLIMITED	SHEET 2 OF 13

Type B/BW

Wide Rib Deck

Also manufactured at Kansas City and Minneapolis



Section Properties, Type B/BW

Type	Design Thickness	I In.⁴/Ft.	S In.³/Ft.	Weight PSF	
				Galv.	Ptd.
22	.0295	.191	.207	1.81	1.73
20	.0358	.232	.252	2.16	2.08
18	.0474	.307	.333	2.85	2.77
16	.0600	.390	.419	3.56	3.49

Safe Uniform Total Load—PSF, Type B/BW

Number of Spans	Type	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"
1 Span	22	94	73	58	48	41	35			
	20	118	91	73	59	50	42	36		
	18	167	128	101	81	67	56	48	42	37
	16	214	164	128	103	84	71	60	52	45
2 Span	22	110	91	77	65	56	49	43	38	
	20	135	111	93	80	69	60	53	47	42
	18	177	147	123	105	91	79	69	61	55
	16	224	185	155	132	114	99	87	77	69
3 Span	22	138	114	96	82	70	61	52	45	40
	20	168	139	117	100	86	74	63	54	47
	18	222	183	154	131	113	99	83	71	62
	16	280	231	194	165	143	124	104	89	76

Roof Deck Design Notes

1. The technical data contained in this catalog is based on the provisions of the latest edition of Light Gage Cold Formed Steel Design Manual as published by the American Iron and Steel Institute; and also conforms to the specifications of the Steel Deck Institute.

2. The following criteria were used in the published loadings. Deflection characteristics for steel deck have been derived in accordance with the requirements of the Steel Deck Institute.

Design	Moment	Deflection
One Span	$M = fS = wL^2 \times 12/8$	D max. = $.013\ wL^4 \times 1728/EI$
Two Spans	$M = fS = wL^2 \times 12/8$	D max. = $.0054\ wL^4 \times 1728/EI$
Three or more spans	$M = fS = wL^2 \times 12/10$	D max. = $.0069\ wL^4 \times 1728/EI$

3. The amount of dead load included is 10 PSF. All loads are governed by the allowable flexural stress limit of 20 KSI. Live load deflection does not exceed 1/240th of the span.

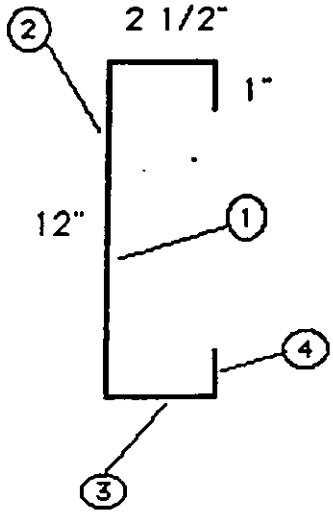
4. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.

5. The rib width limitation shown is taken at the theoretical intersection points of the flange and web projections.

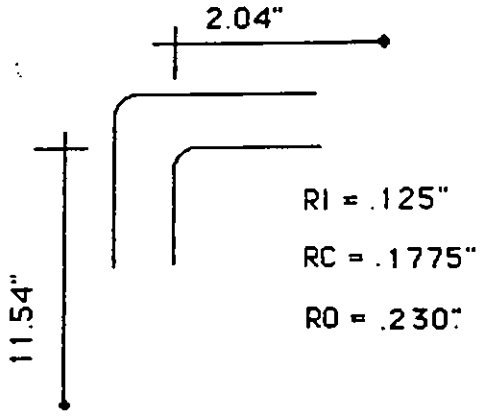
DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	4/10/89		SHEET 3 OF 13

WILDECK 12C12 EWF PROPERTIES

THICKNESS = 0.105"



SECTION ENLARGED RADIUS



Y2 = 5.77 + .637 X .1775

Y2 = 5.883"

Y4 = 6 - .125 - .105 - .385 = 5.385"

	L	Y	LY^2	IO
(1) WEB	11.45"	0	0	13.447
(2) RADIUS	4X 1.57X .20 = 1.256"	5.883"	38.59	0
(3) FLG	1.95 X 2 = 3.9"	5.9475"	144.32	0
(4) STIFF	.725 X 2 = 1.45"	5.385"	44.65	0.01

SUM LY^2 = 227.57

$I = 1.05 \times 227.57 + 13.45 = 37.34\ in^4$

$S = 6.22\ in^3$

MR = 6.22 x 30000 = 186600 LB-IN OR 15.55 K-FT

CHECK GIRDERS

12C12 - SEE SHEET #3

$M_{ACT} = \frac{wl^2}{8}$

$= \frac{(.135)(\frac{13.5}{2})(11.5)^2}{8}$

$= 15.06$ K-FT

$M_{ALL} = 15.55$ K-FT

15.06 K-FT ≤ 15.55 K-FT

$\Delta = \frac{5wl^4}{384EI}$

$= \frac{5(125)(11.5)^4(6.75)(1728)}{(384)(E)(37.34)}$

$= .31$ in

$L/360 = \frac{11.5(12)}{360}$

$= .38''$

$.31$ IN $< .38''$ $\therefore$ OK

GIRDER IS OK.

W18X35

$M_{MAX} = \frac{wl^2}{8}$

$= \frac{(.135)(13.5)(21^2)}{8}$

$= 100.47$ K-FT

$M_{ALL} = F_b \cdot (S)$

$= \frac{24(57.6)}{12}$

$= 115.20$ K-FT

100.47 K-FT ≤ 115.20 K-FT.

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	9/25/89		SHEET 5 OF 13

$$\Delta = \frac{5(125)(13.5)(21)^4(1728)}{384\ (E)\ (510)}$$

$$= .50\ IN$$

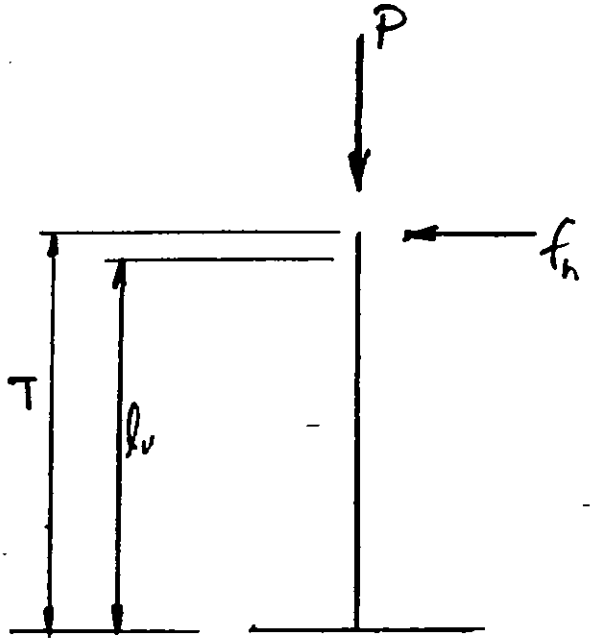
$$\ell/360 = \frac{21(12)}{360}$$

$$= .70\ IN$$

$.50\ IN < .70\ IN$

GIRDER IS OK.

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	9/25/89		SHEET 6 OF 13



COLUMN PROGRAM INPUTS

NORMAL OPERATION

P = TOTAL LOAD

$\left(\frac{22.08}{2}\right)(13.5)(135) = 20{,}120$ lbs

f_h = ASSUMED HORIZONTAL LOAD

200 lbs

SIZE OF COLUMN TUBE

6" X 6" X 3/16"

HEIGHT OF COLUMN (T, INCHES)

119"

CLEAR HEIGHT OF COLUMN (l_v INCHES)

99 3/8"

/

Wildeck Mezzanines Inc. column program calculates the A.I.S.C. unity factor using section 1.6.1, formulas 1.6-1a and/or 1.6-2. K factor in all calculations is 2.10, unless specified otherwise, see p.5-124, table C1.8.1 of A.I.S.C. manual. The program uses ASTM A500, grade B, FY-46 ksi steel properties in calculations.

WILDECK COLUMN DESIGN

COLUMN DATA
---

6 * 6 * 3/16 column tube

Area (sq. in.)	= 4.27
Section Modulus (s,in. cubed)	= 7.93
Radius of Gyration (r,in.)	= 2.36

LOAD DATA

Vertical Column Load (P,kips)	= 20.12
Horizontal Column Load (F,kips)	= .2
Total Column Height (H,inches)	= 119
Column Clear Height (Lc,inches)	= 99.375

Normal Operation

K factor for calculations	= 2.1
kl/r factor for column	= 88.4269
Allowable axial stress (Fa,ksi)	= 16.56734
Actual axial stress (fa,ksi)	= 4.711944
Allowable bending stress (Fb,ksi)	= 27.6
Actual bending stress (fb,ksi)	= 3.001

Force axial actual/allowable = .2844116
Force bending actual/allowable = .1226618

CALCULATED AISC 1.6.1. unity factor = .4070734
AISC unity of 1.0 is not exceeded --- column is ok

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
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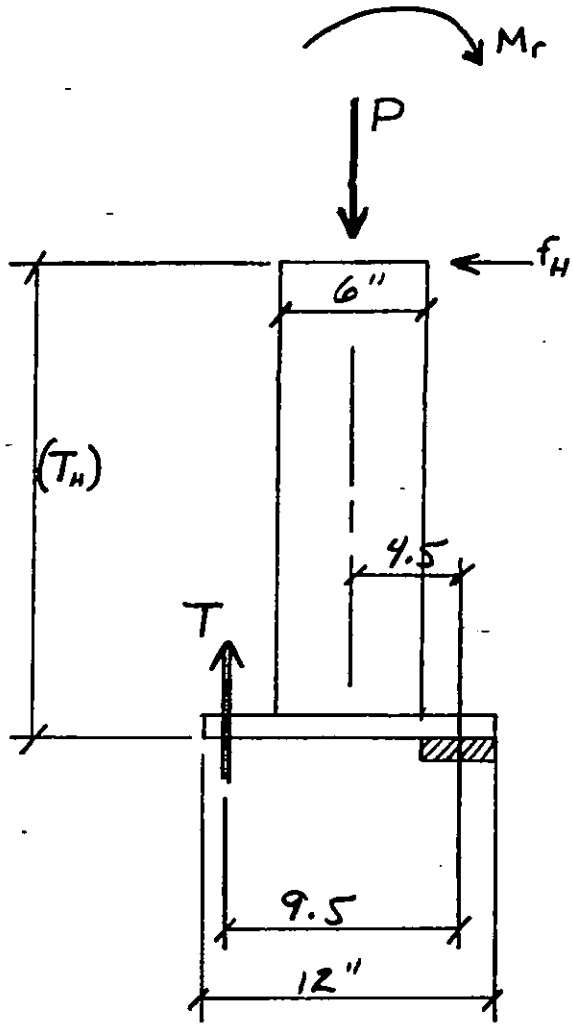
CHECK OVERTURN



$P = 20,120$ lbs

$M_r = (f_H)(T_H)$

$= (200 \text{ lbs})(119")$

$= 23,800$ IN-lbs

$9.5T - 23,800 + 20,120(4.5) = 0$

$9.5T = -66,740$

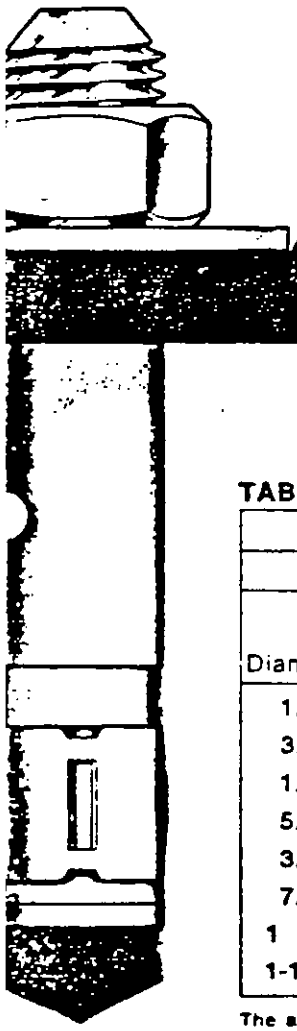
$T = -7,025$ lbs

∴ NO NET UPLIFT

USE 1/2" ANCHORS

Advantages of PARABOLT over other concrete anchoring systems.

- Rockwell Hardness, C-scale 25-30.
- Hole size is bolt size. No need to drill an oversize hole. Minimum volume of concrete removed.
- Fixture serves as a template. No need to move machinery. Alignment assured.
- Nothing else to buy. Nuts and washers provided.
- Clip bites into concrete instantly.
- Working load can be applied immediately.



DESIGN FEATURES

- Stainless Steel Clip for maximum holding power.
- Wrap Around, one piece clip.
- Parabolic Approach on bolt wedge.

THE PARABOLIC CONCEPT RESULTS IN THESE ADVANTAGES:

- The clip is parallel to the bolt axis on insertion.
- Final set is achieved with minimum turns of the nut.
- The clip engages the concrete at an ever increasing angle.
- Marked improvement in tensile performance over comparable anchors.

Average minimum pullout & shear strength measurements
For embedment of 4.5 times bolt diameter

TABLE I

	(SECTION A) 2000 P.S.I. CONCRETE				(SECTION B) 4000 P.S.I. CONCRETE			
	Tensile Load, Lbs.		Shear Load, Lbs.		Tensile Load, Lbs.		Shear Load, Lbs.	
Diameter	Stone Aggregate Concrete	Lightweight Concrete	Stone Aggregate Concrete	Lightweight Concrete	Stone Aggregate Concrete	Lightweight Concrete	Stone Aggregate Concrete	Lightweight Concrete
1/4	1,050	900	1,190	1,000	1,650	1,300	1,190	1,000
3/8	1,765	1,410	3,380	2,750	2,760	1,930	3,380	2,750
1/2	2,980	2,200	7,350	5,500	4,610	2,860	7,350	5,800
5/8	5,040	3,450	11,600	8,920	7,760	4,260	13,500	11,850
3/4	8,530	5,400	16,400	12,650	12,900	6,300	21,750	17,500
7/8	12,500	—	22,500	—	18,750	—	30,000	—
1	15,200	—	29,500	—	23,000	—	39,300	—
1-1/4	23,000	—	47,600	—	35,000	—	63,500	—

The above represents average holding values in shear and tension for anchors tested in each diameter, installed at minimum depth (4½ times bolt diameter).

Greater holding values are achieved by setting anchor deeper into the concrete.

A factor of safety suitable for the application should be applied to the above values to obtain required design loads.

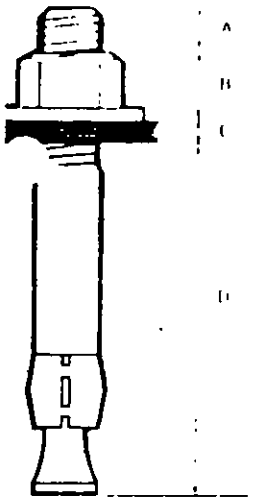
MATERIAL SPECIFICATIONS

• Patented (Patent #3448651) • Bolt Specifications: stressproof steel 132,300 p.s.i. tensile 100,000 p.s.i. yield • Clip is #304 stainless • Plating meets ASTM #A164-55-RS(69) Mil. Std. #QQZ-325-A Class 3 Type 2 clear • Comprehensive Engineering Data available in Cat. EDR #1 • Technical design handbook.

PERFORMANCE APPROVED

• Pittsburgh Testing Laboratories • Factory Mutual • Meets or exceeds GSA specifications FFS-325 Group II, type 4 class I int. Amendment 3 • International Congress of Bldg. Officials Report #2350 • Most states, cities and municipalities in U.S. • (UL) (FM) approved.

ENGINEERING DESIGN DATA



PARABOLT concrete anchor length for your job.

(A) Three turns of nut equals approximately ½ bolt diameter.

(B) Thickness of nut is equal to bolt diameter.

(C) Thickness of material.

(D) Refer to TABLE II for minimum embedment.

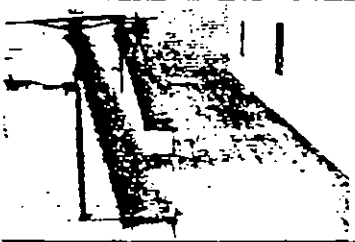
Anchor Installed:
A + B + C + D + minimum anchor length.

Example:
½" diam. anchor to hold ½" angle iron.
¼" + ½" + ½" + 2¼"= 3½" min. length.

If your total is in between two lengths go to the longer size (in this case you would use PB12-4).

TYPICAL APPLICATIONS Sewage treatment plant

Securing drive sprocket wall support to concrete.



Sluice gate control to concrete deck.

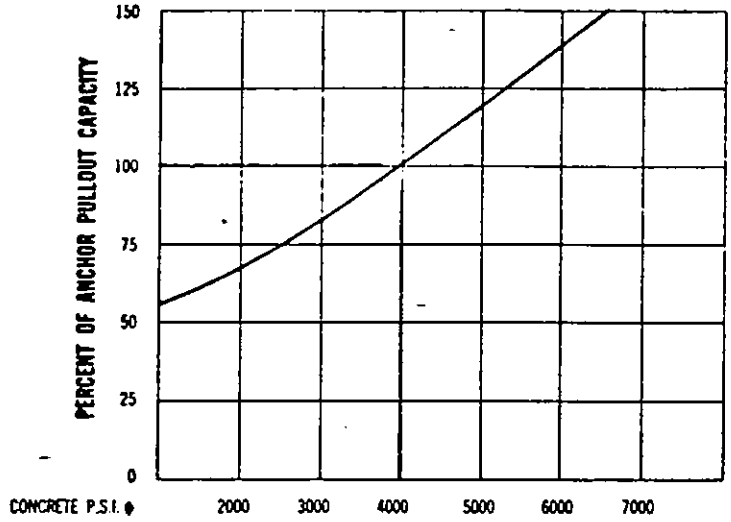
Platform brackets fastened to concrete.

Suggested Architectural Specifications

Contractor shall furnish and install (size) Parabolt Concrete Anchors as manufactured by USM Corporation, 504 Mt. Laurel Avenue, Temple, Pennsylvania.

The anchors shall be made of high tensile and shear strength steel SAE Grade 5 or better. Exceeds requirements for ASTM A-325 type 3-B bolts, with one piece stainless steel expander mounted on parabolic wedge and double plated zinc plating with chromate dip to Federal Specifications QQ-Z-325). Pull out and shear values shall conform to the Standard Test Methods as outlined by ANSI/ASTM E488-76.

PULLOUT STRENGTH VS. CONCRETE P.S.I.



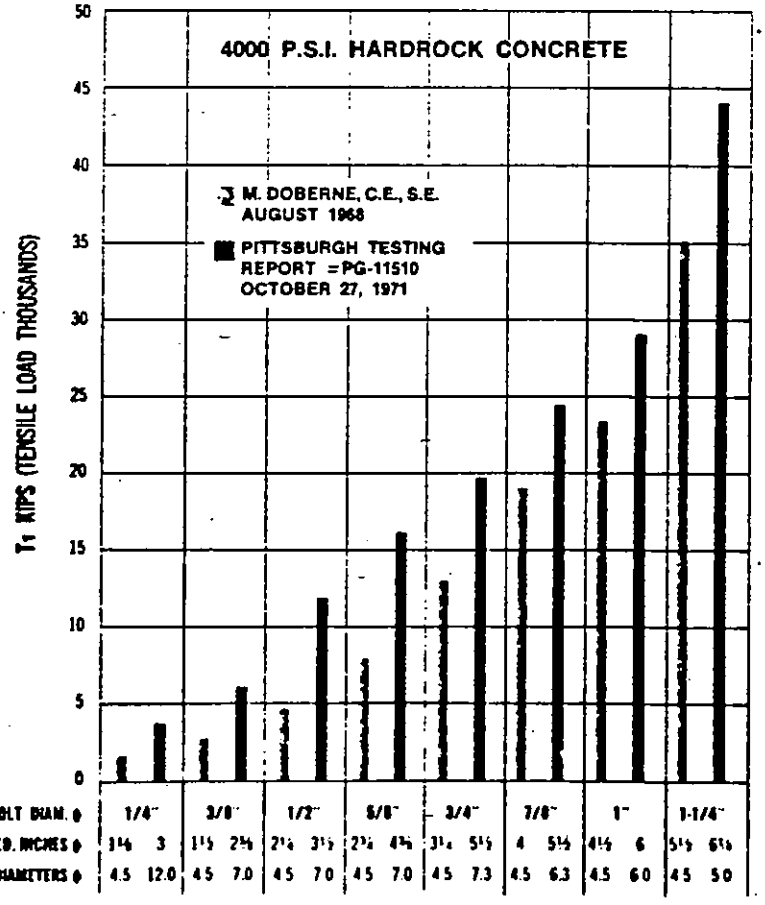
Note: This graph is only applicable for stone aggregate. Figures for light-weight are not available.

Example: 1/2" dia. Anchor in 3000 P.S.I. concrete at minimum embedment:

Pullout value	4610 lbs.
% from graph	X 82%
Pullout strength in 3000 P.S.I. concrete	3780 lbs.

To obtain pullout value, use TABLE I, section B. This graph is based on test of 4000 P.S.I. stone.

PULLOUT STRENGTH VS. ANCHOR EMBEDMENT



EMHART FASTENER GROUP

EMHART

Molly Division Headquarters: 504 Mt. Laurel Ave /Temple, PA 19560 (215) 929-5764/TWX 510-651-0479

West Coast Warehouse: 16830 Edwards Rd /Cerritos, CA 90701 (213) 926-6576

DWG. #	DATE	SPECIFICATION FOR WILDECK SYSTEMS (C-SECTION AND STRUCTURAL)	WILDECK®
SPEC-3			SHEET 11 OF 13

1. FRAMING SHALL CONSIST OF THE FOLLOWING.
   A. WILDECK COLD-FORMED STEEL THAT MEETS THE REQUIREMENTS OF ASTM A570, GRADE 50.

      DESIGN IS IN ACCORDANCE WITH AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".

   B. STRUCTURAL STEEL AS SHOWN ON DRAWINGS IN ACCORDANCE WITH ASTM A-36.

      DESIGN IS IN ACCORDANCE WITH AISI "SPECIFICATIONS".

2. DECK MATERIAL SHALL BE 1-1/2" 20 GA PNTD STEEL, WIDE RIB, MEETING THE REQUIREMENTS OF ASTM-A611 OR WILGRATE TYPE 19W4 - 1" x 1/8" STEEL BAR GRATING AS INDICATED ON DRAWING.

   DESIGN FOR ROOF DECK IS IN ACCORDANCE WITH AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".

   DESIGN FOR BAR GRATING AND BAR GRATING TREADS IS IN ACCORDANCE WITH "NAAMM" METAL BAR GRATING MANUAL.

3. SUPPORT COLUMNS SHALL BE TS 6"x6"x 3/16" (SQUARE WALL) STEEL TUBING MEETING THE REQUIREMENTS OF ASTM A500, GRADE B, FY - 46 KSI, OR AS INDICATED ON DRAWING.

   DESIGN IS IN ACCORDANCE WITH AISC SPECIFICATIONS.

4. ALL BOLTS SHALL BE IN ACCORDANCE WITH ASTM A325.

5. ALL RAIL FOR HANDRAIL AT OPEN ENDS OF MEZZANINE AND STAIRWAYS SHALL BE 1 1/4" ID SCHEDULE 40 PIPE.

6. BRIDGING, IF ANY, SHALL BE CRC1.5" - 16 GA. STEEL.

7. ALL MATERIAL SHALL BE PAINTED WITH ONE COAT OF ASA49 GRAY PAINT.

8. COLUMN BASE PLATE FLOOR ANCHORS SHALL BE 1/2" OR 3/8" DIA. MOLLY PARABOLT CONCRETE ANCHORS OR ENGINEER APPROVED EQUAL. OWNER SHALL ADVISE WILDECK MEZZANINES, INC. OF CONCRETE FLOOR THICKNESS, AND OWNER SHALL ADVISE THE INSTALLATION PEOPLE OF ANY EMBEDDED FLOOR OBSTACLES THAT MAY INTERFERE WITH THE INSTALLATION OF FLOOR ANCHORS.

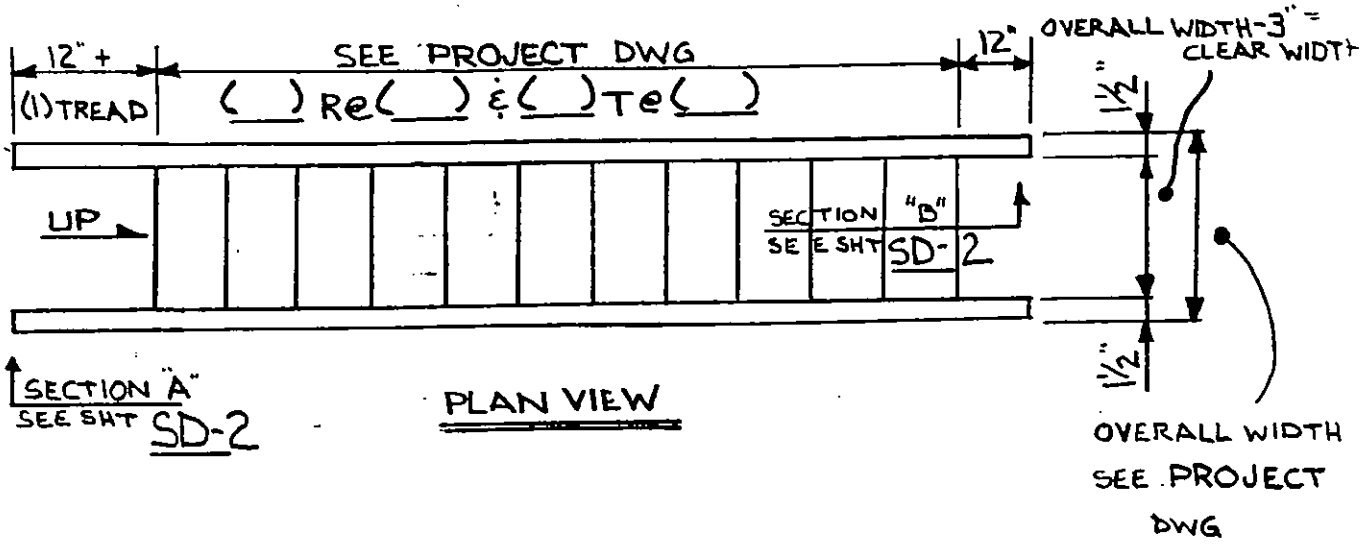
9. ERECTION, IF NOT INCLUDED IN CONTRACT, IS THE RESPONSIBILITY OF THE OWNER OR DEALER, AND SHALL BE IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.

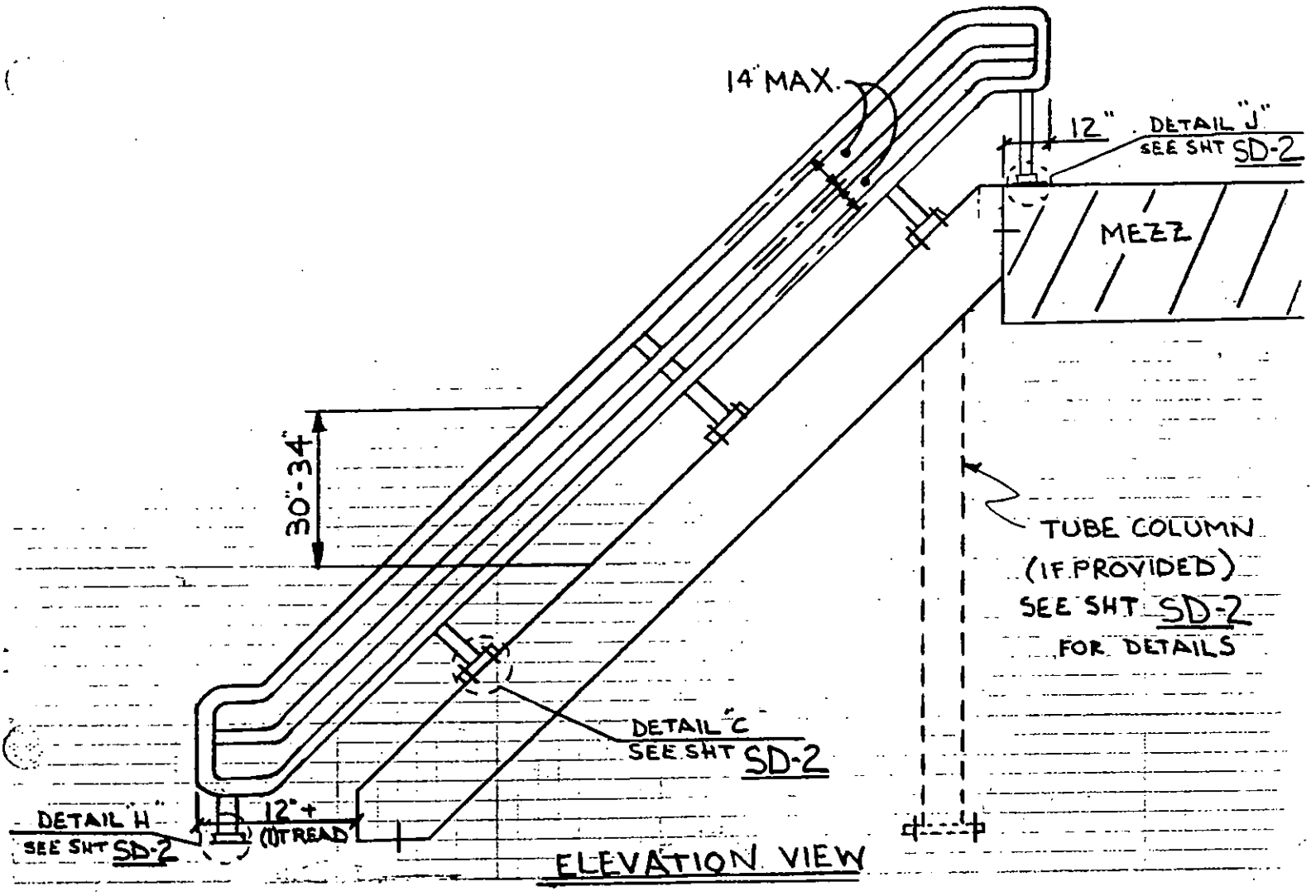
10. CONFORMANCE WITH LOCAL CODES IS THE RESPONSIBILITY OF THE OWNER.

11. THE WILDECK SYSTEM IS DESIGNED FOR 125 PSF LIVE LOAD AS SPECIFIED.

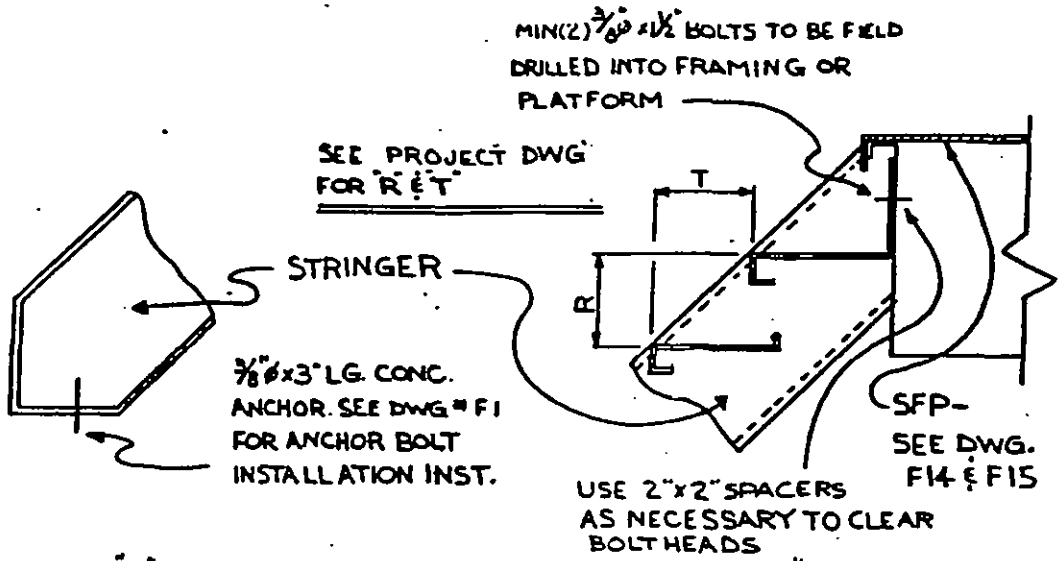
12. DRAWINGS & ERECTION MANUAL SHALL BE PROVIDED BY WILDECK MEZZANINES, INC.

DWG. #	DATE	BOCA '84, '86 CODE STAIR	WILDECK®
S7			SHEET 12 OF 13

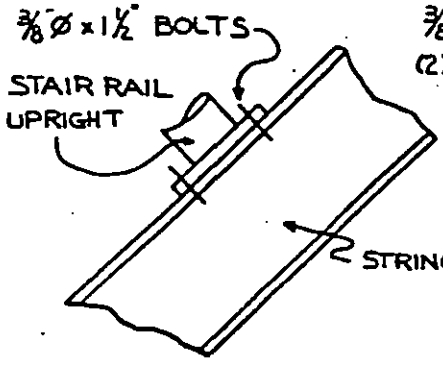




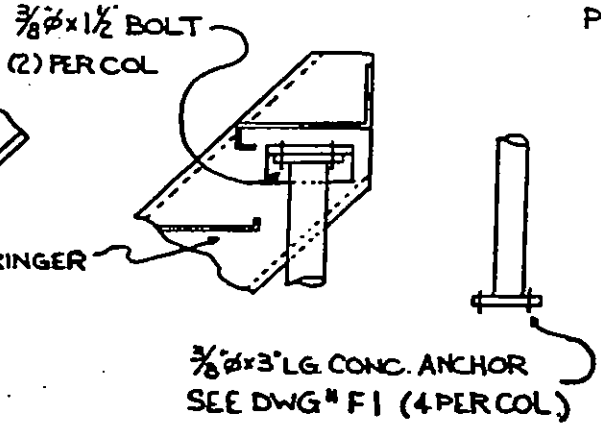
DWG. #	DATE	CLOSED TREAD AND OPEN RISER DETAIL	WILDECK®
SD-3			SHEET 13 OF 13



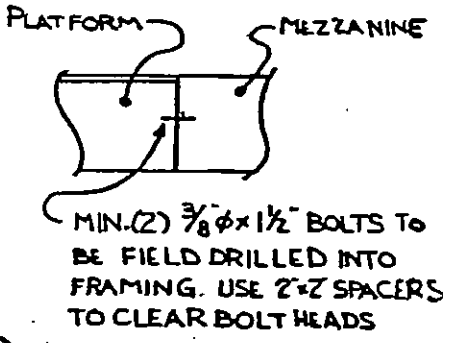
SECTION "A"



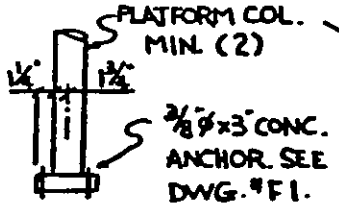
SECTION "B"



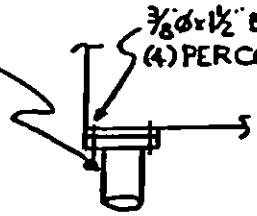
SECTION "D"

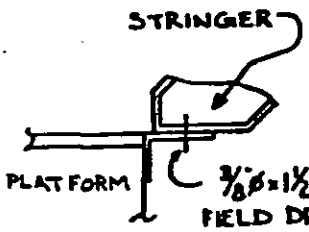


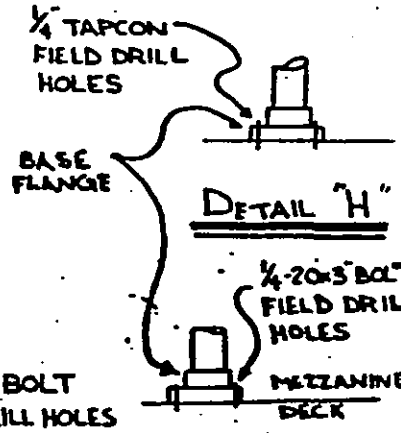
DETAIL "C"



STAIR COLUMN DETAILS (WHEN PROVIDED)







DETAIL "E"

DETAIL "F"

DETAIL "G"

DETAIL "H"

DETAIL "J"

DWG. #	DATE		WILDECK®
COVER		COVER SHEET	

DESIGN CALCULATIONS

MEZZANINE SYSTEM

FOR

SPIRITS UNLIMITED

WMI #2785

Prepared by

WILDECK MEZZANINES, INC.

Ralph H. Laird

Vice President

PE ILL 25609

CALCULATIONS 1, 3-8
ROOF DECK DATA 2
FLOOR ANCHOR DATA 9-10
SPEC 11
STAIR DETAILS 12,13

Chander P Narang
10/4/89

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	9/25/89		SHEET 1 OF 13

LIVE LOAD	125	PSF
DEAD LOAD	10	PSF
TOTAL LOAD	135	PSF

CHECK ROOF DECK (20 GAUGE - SEE SHEET # 2)
MAX. JOIST SPACING — 4.36'

$$f_b = \frac{M}{S} = \frac{wl^2}{8S}$$

$$= \frac{(135)(4.36^2)(12)}{8(.252)}$$

$$= 15,276 \text{ psi}$$

$15,276 \text{ psi} \leq 20,000 \text{ psi}$

$\therefore$ OK

CHECK JOISTS - (12C12 - SEE SHEET #3)

$$M_{ACT} = \frac{wl^2}{8}$$

$M_{ALL} = 15.55$ K-FT

$$= \frac{(135)(4.36)(13.5)^2}{8}$$

$= 13.41$ K-FT

$13.41 \text{ K-FT} \leq 15.55 \text{ K-FT}$

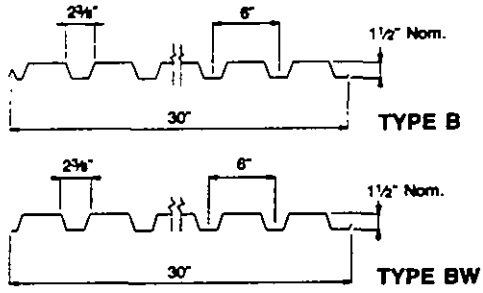
$\therefore$ OK

DWG. #	DATE		WILDECK®
2785	9/25/89	SPIRITS UNLIMITED	SHEET 2 OF 13

Type B/BW

Wide Rib Deck

Also manufactured at Kansas City and Minneapolis



Section Properties, Type B/BW

Type	Design Thickness	I In.⁴/Ft.	S In.³/Ft.	Weight PSF	
				Galv.	Ptd.
22	.0295	.191	.207	1.81	1.73
20	.0358	.232	.252	2.16	2.08
18	.0474	.307	.333	2.85	2.77
16	.0600	.390	.419	3.56	3.49

Safe Uniform Total Load—PSF, Type B/BW

Number of Spans	Type	5'-0"	5'-6"	6'-0"	6'-6"	7'-0"	7'-6"	8'-0"	8'-6"	9'-0"
1 Span	22	94	73	58	48	41	35			
	20	118	91	73	59	50	42	36		
	18	167	128	101	81	67	56	48	42	37
	16	214	164	128	103	84	71	60	52	45
2 Span	22	110	91	77	65	56	49	43	38	
	20	135	111	93	80	69	60	53	47	42
	18	177	147	123	105	91	79	69	61	55
	16	224	185	155	132	114	99	87	77	69
3 Span	22	138	114	96	82	70	61	52	45	40
	20	168	139	117	100	86	74	63	54	47
	18	222	183	154	131	113	99	83	71	62
	16	280	231	194	165	143	124	104	89	76

Roof Deck Design Notes

1. The technical data contained in this catalog is based on the provisions of the latest edition of Light Gage Cold Formed Steel Design Manual as published by the American Iron and Steel Institute; and also conforms to the specifications of the Steel Deck Institute.

2. The following criteria were used in the published loadings. Deflection characteristics for steel deck have been derived in accordance with the requirements of the Steel Deck Institute.

Design	Moment	Deflection
One Span	$M = fS = wL^2 \times 12/8$	D max. = $.013\ wL^4 \times 1728/EI$
Two Spans	$M = fS = wL^2 \times 12/8$	D max. = $.0054\ wL^4 \times 1728/EI$
Three or more spans	$M = fS = wL^2 \times 12/10$	D max. = $.0069\ wL^4 \times 1728/EI$

3. The amount of dead load included is 10 PSF. All loads are governed by the allowable flexural stress limit of 20 KSI. Live load deflection does not exceed 1/240th of the span.

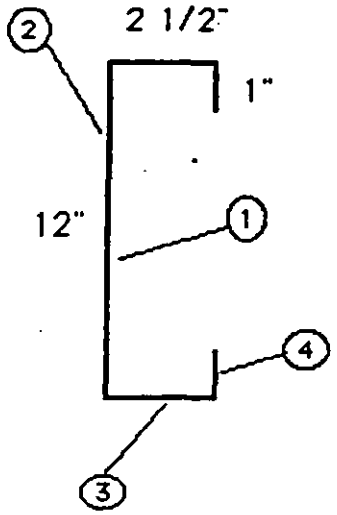
4. Span length assumes center-to-center spacing of supports. Tabulated loads shall not be increased by assuming clear span dimensions.

5. The rib width limitation shown is taken at the theoretical intersection points of the flange and web projections.

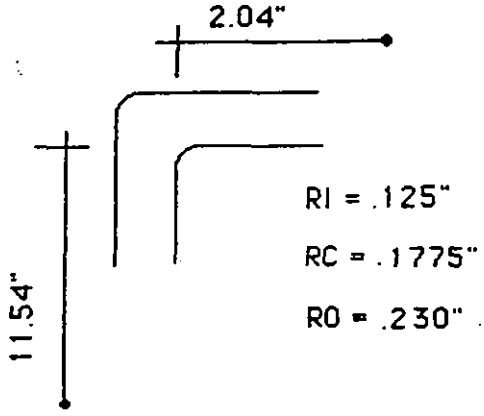
DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	4/10/89		SHEET 3 OF 13

WILDECK 12C12 EWF PROPERTIES

THICKNESS = 0.105"



SECTION ENLARGED RADIUS



Y2 = 5.77 + .637 X .1775

Y2 = 5.883"

Y4 = 6 - .125 - .105 - .385 = 5.385"

	L	Y	LY^2	IO
(1) WEB	11.45"	0	0	13.447
(2) RADIUS	4 X 1.57 X .20 = 1.256"	5.883"	38.59	0
(3) FLG	1.95 X 2 = 3.9"	5.9475"	144.32	0
(4) STIFF	.725 X 2 = 1.45"	5.385"	44.65	0.01

SUM LY^2 = 227.57

$I = 1.05 \times 227.57 + 13.45 = 37.34 \text{ in}^4$

$S = 6.22 \text{ in}^3$

MR = 6.22 x 30000 = 186600 LB-IN OR 15.55 K-FT

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	9/25/89		SHEET 4 OF 13

CHECK GIRDERS

12C12 – SEE SHEET #3

$M_{ACT} = \frac{wl^2}{8}$

$= \frac{(.135)(\frac{13.5}{2})(11.5)^2}{8}$

$= 15.06$ K-FT

$M_{ALL} = 15.55$ K-FT

15.06 K-FT ≤ 15.55 K-FT

$\Delta = \frac{5wl^4}{384EI}$

$= \frac{5(125)(11.5)^4(6.75)(1728)}{(384)(E)(37.34)}$

$= .31$ in

$L/360 = \frac{11.5(12)}{360}$

$= .38''$

$.31$ IN $< .38''$ $\therefore$ OK

GIRDER IS OK.

W18X35

$M_{MAX} = \frac{wl^2}{8}$

$= \frac{(.135)(13.5)(21^2)}{8}$

$= 100.47$ K-FT

$M_{ALL} = F_b \cdot (S)$

$= \frac{24(57.6)}{12}$

$= 115.20$ K-FT

100.47 K-FT ≤ 115.20 K-FT.

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK® SHEET 5 OF 13
2785	9/29/89		

$$\Delta = \frac{5(125)(13.5)(21)^4(728)}{384\ (E)\ (510)}$$

$$= .50\ IN$$

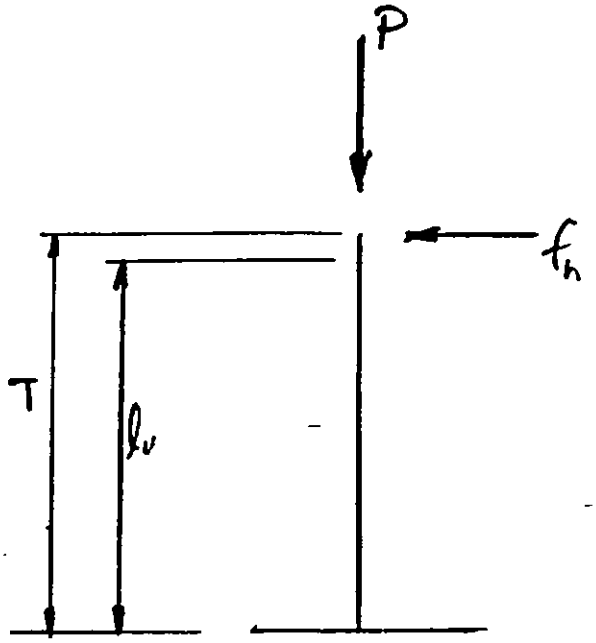
$$\ell/360 = \frac{21(12)}{360}$$

$$= .70\ IN$$

$.50\ IN < .70\ IN$

GIRDER IS OK

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	9/25/89		SHEET 6 OF 13



COLUMN PROGRAM INPUTS

NORMAL OPERATION

P = TOTAL LOAD

$\left(\frac{22.08}{2}\right)(13.5)(135) = 20{,}120$ lbs

f_h = ASSUMED HORIZONTAL LOAD

200 lbs

SIZE OF COLUMN TUBE

6"X6"X 3/16"

HEIGHT OF COLUMN (T, INCHES)

119"

CLEAR HEIGHT OF COLUMN (l_v INCHES)

99 3/8"

Wildeck Mezzanines Inc. column program calculates the A.I.S.C. unity factor using section 1.6.1, formulas 1.6-1a and/or 1.6-2. K factor in all calculations is 2.10, unless specified otherwise, see p.5-124, table C1.8.1 of A.I.S.C. manual. The program uses ASTM A500, grade B, FY-46 ksi steel properties in calculations.

WILDECK COLUMN DESIGN

COLUMN DATA

6 * 6 * 3/16 column tube

Area (sq. in.)	= 4.27
Section Modulus (s,in. cubed)	= 7.93
Radius of Gyration (r,in.)	= 2.36

LOAD DATA

Vertical Column Load (P,kips)	= 20.12
Horizontal Column Load (F,kips).	= .2
Total Column Height (H,inches)	= 119
Column Clear Height (Lc,inches)	= 99.375

Normal Operation

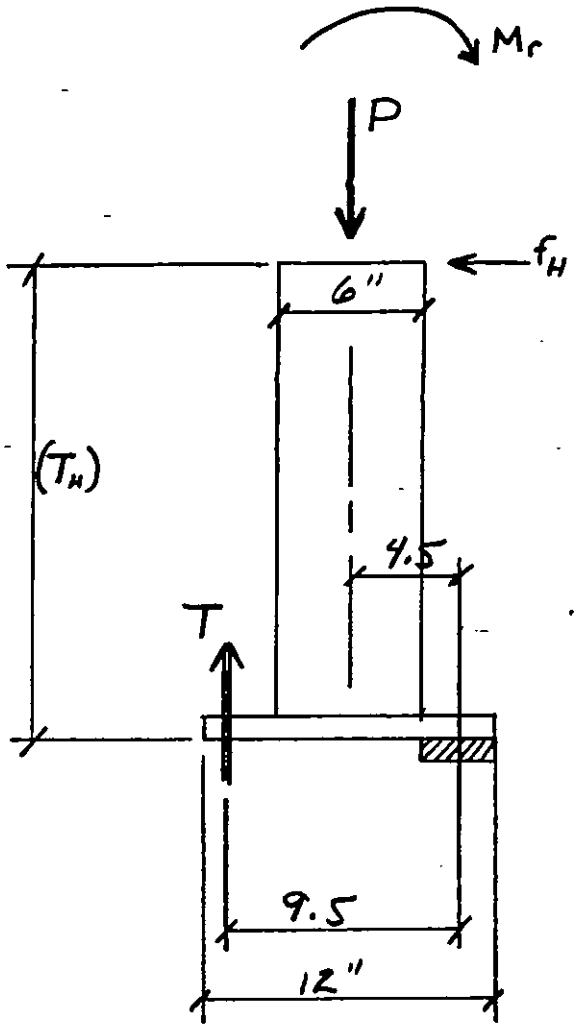
K factor for calculations	= 2.1
kl/r factor for column	= 88.4269
Allowable axial stress (Fa,ksi)	= 16.56734
Actual axial stress (fa,ksi)	= 4.711944
Allowable bending stress (Fb,ksi)	= 27.6
Actual bending stress (fb,ksi)	= 3.001

Force axial actual/allowable = .2844116
Force bending actual/allowable = .1226618

CALCULATED AISC 1.6.1. unity factor = .4070734
AISC unity of 1.0 is not exceeded --- column is ok

DWG. #	DATE	SPIRITS UNLIMITED	WILDECK®
2785	9/25/89		SHEET 8 OF 13

CHECK OVERTURN



$P = 20,120$ lbs

$M_r = (f_H)(T_H)$

$= (200 \text{ lbs})(119")$

$= 23,800$ IN-lbs

$9.5T - 23,800 + 20,120(4.5) = 0$

$9.5T = -66,740$

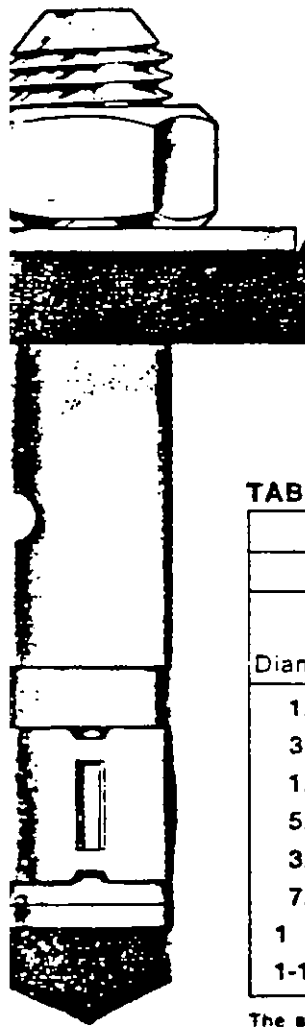
$T = -7,025$ lbs

$\therefore$ NO NET UPLIFT

USE 1/2" ANCHORS

Advantages of PARABOLT over other concrete anchoring systems.

- Rockwell Hardness, C-scale 25-30.
- Hole size is bolt size. No need to drill an oversize hole. Minimum volume of concrete removed.
- Fixture serves as a template. No need to move machinery. Alignment assured.
- Nothing else to buy. Nuts and washers provided.
- Clip bites into concrete instantly.
- Working load can be applied immediately.



DESIGN FEATURES

- Stainless Steel Clip for maximum holding power.
- Wrap Around, one piece clip.
- Parabolic Approach on bolt wedge.

THE PARABOLIC CONCEPT RESULTS IN THESE ADVANTAGES:

- The clip is parallel to the bolt axis on insertion.
- Final set is achieved with minimum turns of the nut.
- The clip engages the concrete at an ever increasing angle.
- Marked improvement in tensile performance over comparable anchors.

Average minimum pullout & shear strength measurements For embedment of 4.5 times bolt diameter

TABLE I

	(SECTION A) 2000 P.S.I. CONCRETE				(SECTION B) 4000 P.S.I. CONCRETE			
	Tensile Load, Lbs.		Shear Load, Lbs.		Tensile Load, Lbs.		Shear Load, Lbs.	
Diameter	Stone Aggregate Concrete	Lightweight Concrete	Stone Aggregate Concrete	Lightweight Concrete	Stone Aggregate Concrete	Lightweight Concrete	Stone Aggregate Concrete	Lightweight Concrete
1/4	1,050	900	1,190	1,000	1,650	1,300	1,190	1,000
3/8	1,765	1,410	3,380	2,750	2,760	1,930	3,380	2,750
1/2	2,980	2,200	7,350	5,500	4,610	2,860	7,350	5,800
5/8	5,040	3,450	11,600	8,920	7,760	4,260	13,500	11,850
3/4	8,530	5,400	16,400	12,650	12,900	6,300	21,750	17,500
7/8	12,500	—	22,500	—	18,750	—	30,000	—
1	15,200	—	29,500	—	23,000	—	39,300	—
1-1/4	23,000	—	47,600	—	35,000	—	63,500	—

The above represents average holding values in shear and tension for anchors tested in each diameter, installed at minimum depth (4½ times bolt diameter).

Greater holding values are achieved by setting anchor deeper into the concrete.

A factor of safety suitable for the application should be applied to the above values to obtain required design loads.

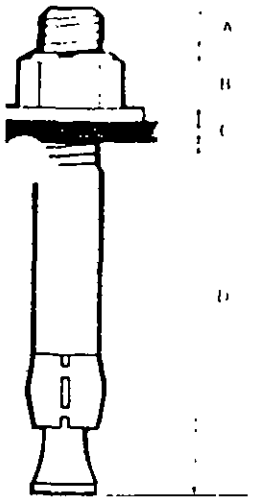
MATERIAL SPECIFICATIONS

• Patented (Patent #3448651) • Bolt Specifications: stressproof steel 132,300 p.s.i. tensile 100,000 p.s.i. yield • Clip is #304 stainless • Plating meets ASTM #A164-55-RS(69) Mil. Std. • QQZ-325-A Class 3 Type 2 clear • Comprehensive Engineering Data available in Cat. EDR #1 • Technical design handbook.

PERFORMANCE APPROVED

• Pittsburgh Testing Laboratories • Factory Mutual • Meets or exceeds GSA specifications FFS-325 Group II, type 4 class I Int. Amendment 3 • International Congress of Bldg. Officials Report #2350 • Most states, cities and municipalities in U.S. • (UL) (FM) approved.

ENGINEERING DESIGN DATA



How to determine PARABOLT concrete anchor length for your job.

(A) Three turns of nut equals approximately ½ bolt diameter.

(B) Thickness of nut is equal to bolt diameter.

(C) Thickness of material.

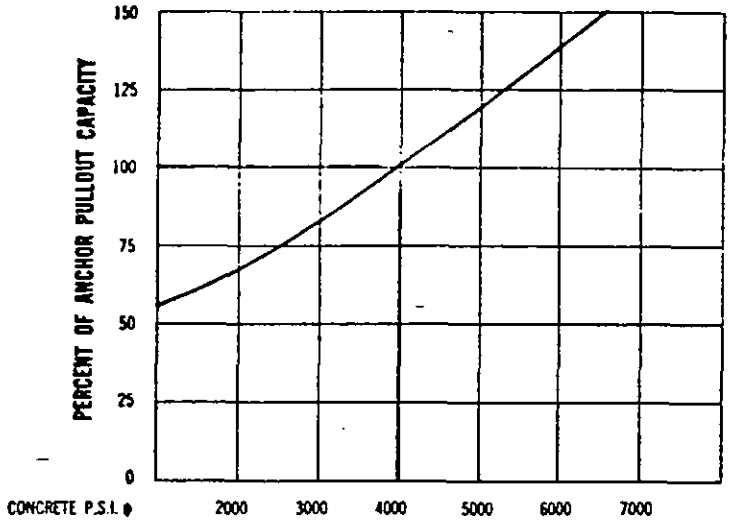
(D) Refer to TABLE II for minimum embedment.

Anchor Installed:
A + B + C + D + minimum anchor length.

Example:
½" diam. anchor to hold ½" angle iron.
¼" + ½" + ½" + 2¼" = 3½" min. length.

If your total is in between two lengths go to the longer size (in this case you would use PB12-4).

PULLOUT STRENGTH VS. CONCRETE P.S.I.



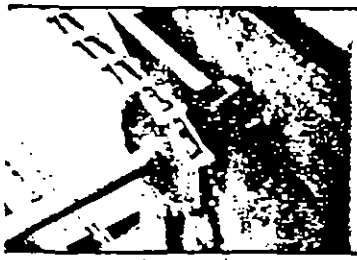
Note: This graph is only applicable for stone aggregate. Figures for light-weight are not available.

Example: 1/2" dia. Anchor in 3000 P.S.I. concrete at minimum embedment:

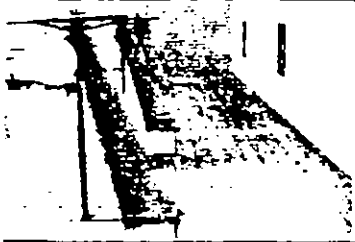
Pullout value	4610 lbs.
% from graph	X 82%
Pullout strength in 3000 P.S.I. concrete	3780 lbs.

To obtain pullout value, use TABLE I, section B. This graph is based on test of 4000 P.S.I. stone.

TYPICAL APPLICATIONS Sewage treatment plant



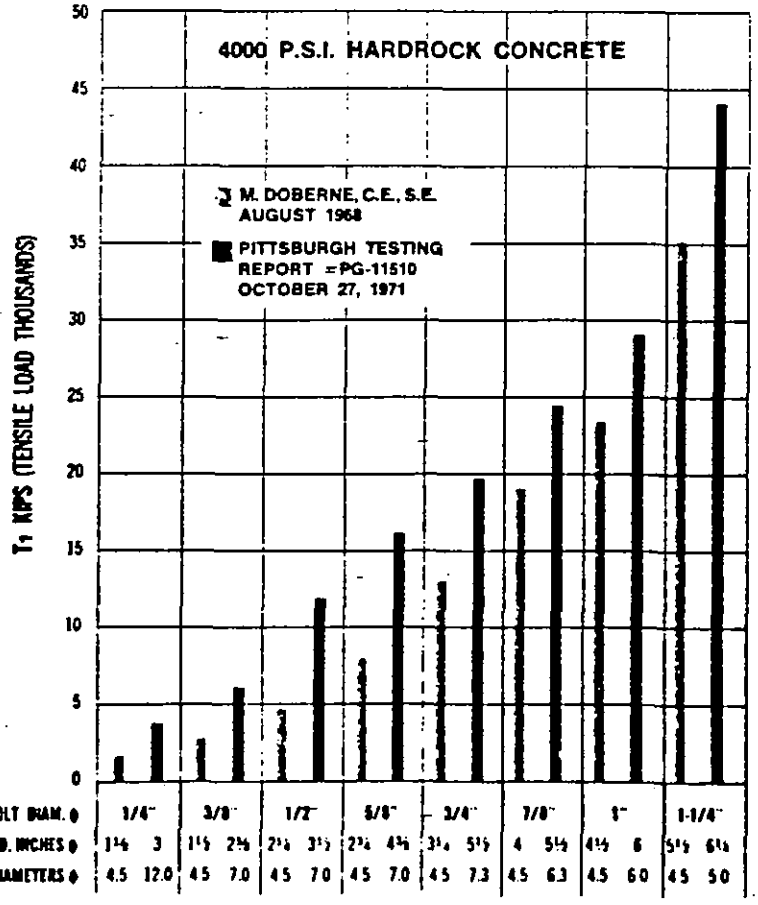
Securing drive sprocket wall support to concrete.



Sluice gate control to concrete deck.

Platform brackets fastened to concrete.

PULLOUT STRENGTH VS. ANCHOR EMBEDMENT



Suggested Architectural Specifications

Contractor shall furnish and install (size) Parabolt Concrete Anchors as manufactured by USM Corporation, 504 Mt. Laurel Avenue, Temple, Pennsylvania.

The anchors shall be made of high tensile and shear strength steel SAE Grade 5 or better. Exceeds requirements for ASTM A-325 type 3-B bolts, with one piece stainless steel expander mounted on parabolic wedge and double plated zinc plating with chromate dip to Federal Specifications QQ-Z-325). Pull out and shear values shall conform to the Standard Test Methods as outlined by ANSI/ASTM E488-76.

USM FASTENER GROUP

EMHART

Molly Division Headquarters: 504 Mt. Laurel Ave /Temple, PA 19560 (215) 929-5764/TWX 510-651-0479

West Coast Warehouse: 16830 Edwards Rd /Cerritos, CA 90701 (213) 926-6576

DWG. #	DATE	SPECIFICATION FOR WILDECK SYSTEMS (C-SECTION AND STRUCTURAL)	WILDECK®
SPEC-3			SHEET 11 OF 13

1. FRAMING SHALL CONSIST OF THE FOLLOWING.
   A. WILDECK COLD-FORMED STEEL THAT MEETS THE REQUIREMENTS OF ASTM A570, GRADE 50.

      DESIGN IS IN ACCORDANCE WITH AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".

   B. STRUCTURAL STEEL AS SHOWN ON DRAWINGS IN ACCORDANCE WITH ASTM A-36.

      DESIGN IS IN ACCORDANCE WITH AISI "SPECIFICATIONS".

2. DECK MATERIAL SHALL BE 1-1/2" 20 GA PNTD STEEL, WIDE RIB, MEETING THE REQUIREMENTS OF ASTM-A611 OR WILGRATE TYPE 19W4 - 1" x 1/8" STEEL BAR GRATING AS INDICATED ON DRAWING.

   DESIGN FOR ROOF DECK IS IN ACCORDANCE WITH AISI "SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".

   DESIGN FOR BAR GRATING AND BAR GRATING TREADS IS IN ACCORDANCE WITH "NAAMM" METAL BAR GRATING MANUAL.

3. SUPPORT COLUMNS SHALL BE TS 6"x6"x 3/16" (SQUARE WALL) STEEL TUBING MEETING THE REQUIREMENTS OF ASTM A500, GRADE B, FY - 46 KSI, OR AS INDICATED ON DRAWING.

   DESIGN IS IN ACCORDANCE WITH AISC SPECIFICATIONS.

4. ALL BOLTS SHALL BE IN ACCORDANCE WITH ASTM A325.

5. ALL RAIL FOR HANDRAIL AT OPEN ENDS OF MEZZANINE AND STAIRWAYS SHALL BE 1 1/4" ID SCHEDULE 40 PIPE.

6. BRIDGING, IF ANY, SHALL BE CRC1.5" - 16 GA. STEEL.

7. ALL MATERIAL SHALL BE PAINTED WITH ONE COAT OF ASA49 GRAY PAINT.

8. COLUMN BASE PLATE FLOOR ANCHORS SHALL BE 1/2" OR 3/8" DIA. MOLLY PARABOLT CONCRETE ANCHORS OR ENGINEER APPROVED EQUAL. OWNER SHALL ADVISE WILDECK MEZZANINES, INC. OF CONCRETE FLOOR THICKNESS, AND OWNER SHALL ADVISE THE INSTALLATION PEOPLE OF ANY EMBEDDED FLOOR OBSTACLES THAT MAY INTERFERE WITH THE INSTALLATION OF FLOOR ANCHORS.

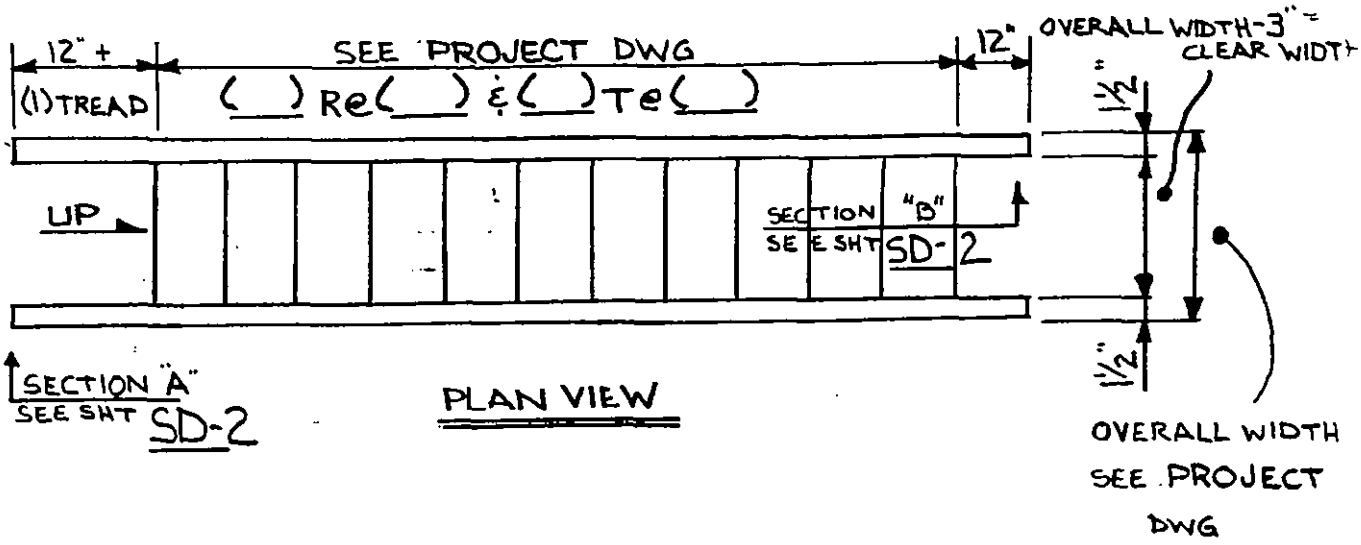
9. ERECTION, IF NOT INCLUDED IN CONTRACT, IS THE RESPONSIBILITY OF THE OWNER OR DEALER, AND SHALL BE IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.

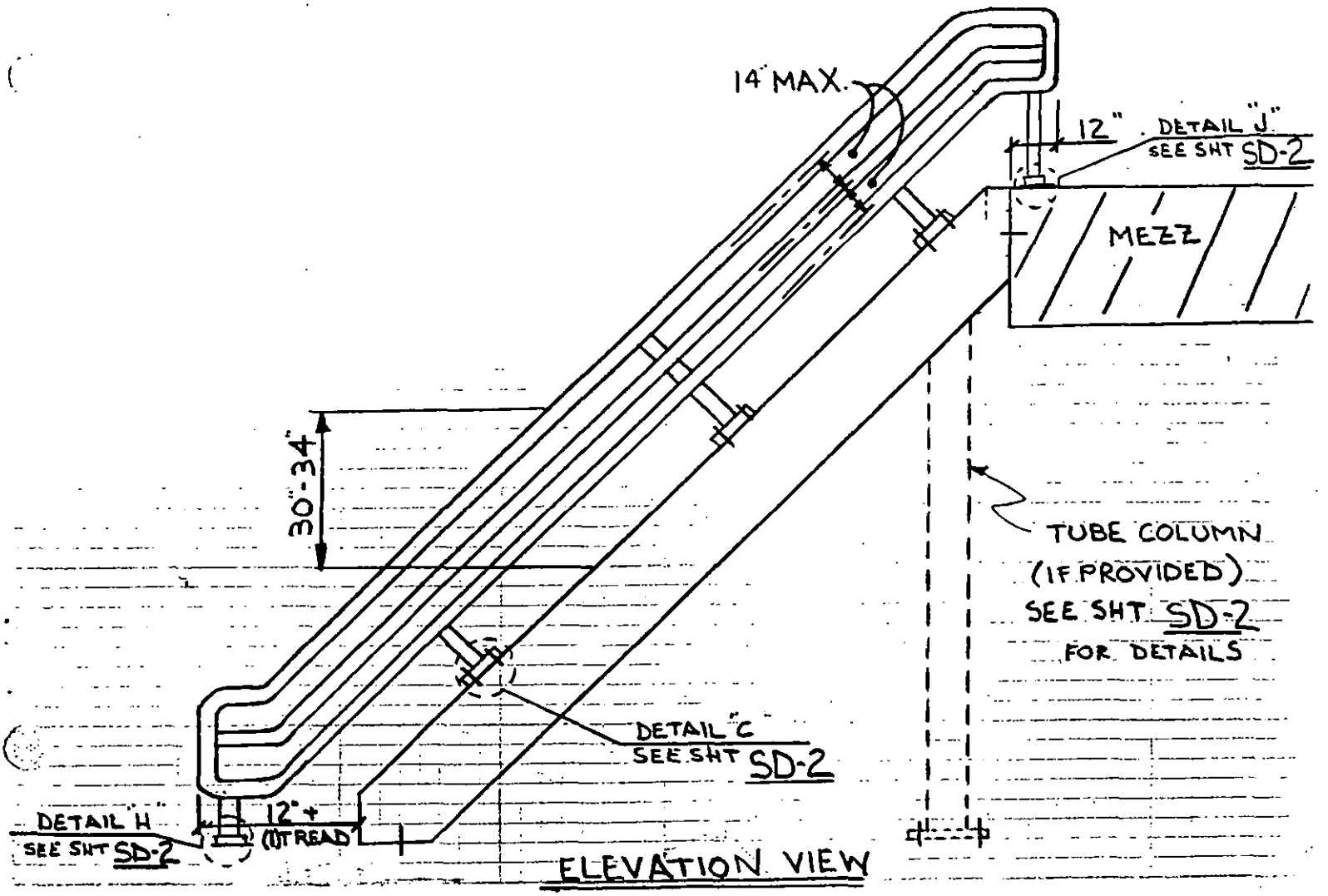
10. CONFORMANCE WITH LOCAL CODES IS THE RESPONSIBILITY OF THE OWNER.

11. THE WILDECK SYSTEM IS DESIGNED FOR 125 PSF LIVE LOAD AS SPECIFIED.

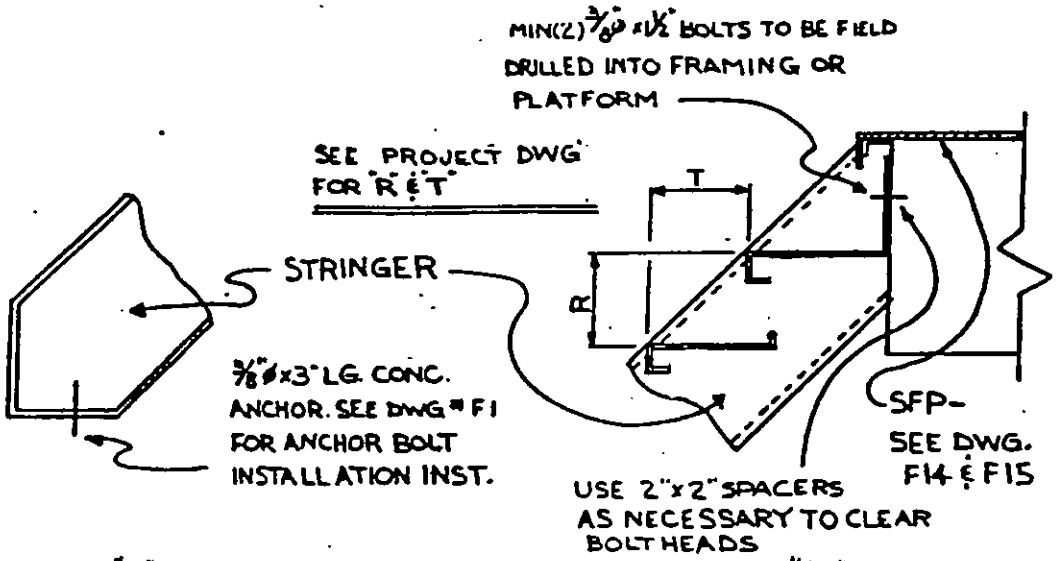
12. DRAWINGS & ERECTION MANUAL SHALL BE PROVIDED BY WILDECK MEZZANINES, INC.

DWG. #	DATE	BOCA '84, '86 CODE STAIR	WILDECK®
S7			SHEET 12 OF 13



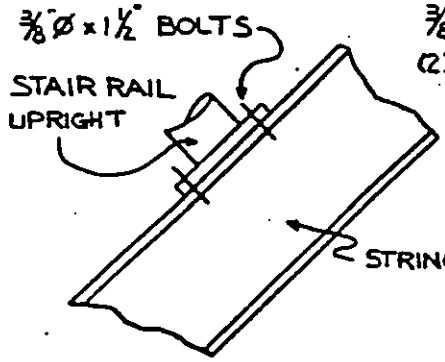


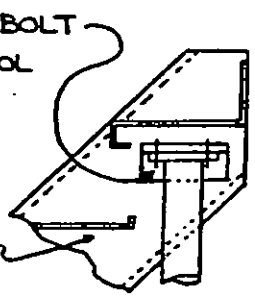
DWG. #	DATE	CLOSED TREAD AND OPEN RISER DETAIL	WILDECK®
SD-3			SHEET 13 OF 13

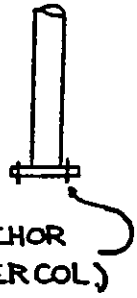


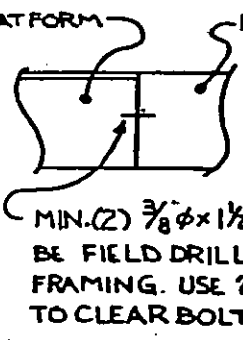
SECTION "A"

SECTION "B"





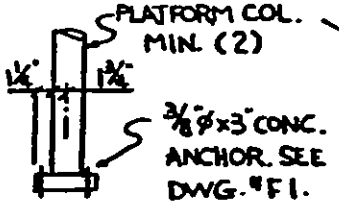


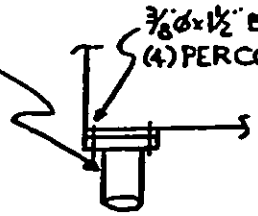


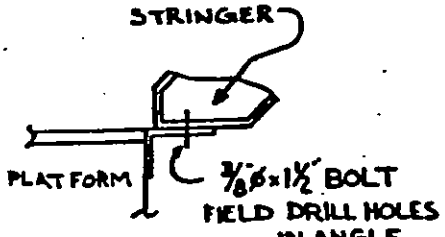
SECTION "D"

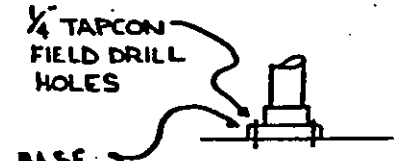
DETAIL "C"

STAIR COLUMN DETAILS (WHEN PROVIDED)

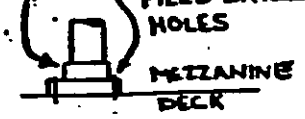








DETAIL "H"



DETAIL "E"

DETAIL "F"

DETAIL "G"

DETAIL "J"