BLOCK 725 LOT 1 ADDRESS (SITE) O.C Vo-Tech - Brick Center PERMIT NO. 1608.92

DIV. OF INSPECTION
JUL 20 1992
RECEIVED

CONSTRUCTION PERMIT APPLICATION

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

I. IDENTIFICATION

1. Proposed Work-site at: O.C. Vo-Tech - Brick Center Chambers Bridge Rd
2. Name of Owner in Fee: OC Vo-Tech Bd of Ed Tel. (908) 349-8567
   Address 137 Bey Lea Rd (street) Toms River (municipality) 08753 (zip code)
3. Ownership in Fee: Public ✓ Private ____
4. Principal Contractor: Allied Boiler Repair Co Tel. (908) 341-5908
   Address 1520 Rt 37 West & Industrial Way North P.O. Box 1891
   License No. OR, if new home, Builder Reg. No. ____ Exp. Date ____
   Federal Emp. No. 22-2800-830 Social Security No. ____
5. Architect or Engineer Bd of Education Tel. (908) 349-8567
   Address 137 Bey Lea Rd - Toms River
6. Responsible Person In Charge of Work William Boggiano Tel. (908) 341-5907

Convert Elec to Gas

II. PROPOSED WORK

	Est. Cost
1. ☐ Minor Work (single trade)	
2. ☐ Small Job ($5,000 and no prior approvals)	
3. ☐ New Building	
4. ☐ Addition	
5. ☐ Alteration	
6. ☐ Fire Protection	
7. ☑ Plumbing	
8. ☐ Electrical	
9. ☐ Asbestos Abatement	
10. ☐ Demolition	
TOTAL COSTS	

OPTIONAL (for office use only)

Plans Rec'd By	Date Rec'd	Rejection Date	Approval Date	Re-viewer	Resubmission Dates Approval	Resubmission Dates Rejection	Re-viewer
7/20/92	7/8		8/5/92				
			7/22/92		9/25/92		
			7-21-92		9-25-92		

III. DO YOU WANT: (optional) 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
8. ☐ Smoke Control Systems in Open Wells
9. ☐ Underground Storage Tanks

V. FEE SUMMARY (for office use only)

		Update	Update
1. Building	$		
2. Electrical			
3. Plumbing		40	
4. Fire Protection		33	
5. Other			
6. Subtotal	$	73	
7. Less 20% for State Plan Review		Ø	
8. Subtotal	$		
9. DCA Training Fee			
10. Subtotal	$		
11. Cert. of Occupancy		20	
12. Other			
13. TOTAL	$	93	

VI. BUILDING/SITE CHARACTERISTICS

	(office use only)
1. Number of Stories	
2. Height of Structure ____ ft.	
3. Area—Largest Floor ____ sq. ft.	
4. Building Area—All Floors ____ sq. ft.	
5. Volume of Structure ____ cu. ft.	
6. Construction Classification	
7. Total Land Area Disturbed ____ sq. ft.	
8. Flood Hazard Zone	
9. Base Flood Elevation ____ ft.	
10. Wetlands yes ____ sq. ft. / no ____	
11. Fire Grading	
12. Max. Live Load	
13. Max. Occupancy Load	

VII. DESCRIPTION OF BUILDING USE

A. RESIDENTIAL
1. ☐ Hotels (R-1)
2. ☐ Multi-Family (R-2)
3. ☐ Two-Family (R-3) BOCA
4. ☐ Two-Family (R-4) CABO
5. ☐ One-Family (R-3) BOCA
6. ☐ One-Family (R-4) CABO

No of dwelling units:
Before Construction ____
After Construction ____
Net gain or loss ____

B. NON-RESIDENTIAL
1. State Specific Use: Voc. School
2. Use Group: E
3. Change in Use Group, Indicate Former:

LDS BR 10409021

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(e)1.vii:

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 New Jersey Uniform Construction Code, N.J.A.C. 5:32-2.15(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 Allied Boiler Repair Co.

Address 1520 Rt. 37 West & Industrial Way North P.O. Box 1891
Toms River, NJ 08754

Telephone (908) 341-5907

Signature [signature] Date 7-20-92

OFFICE DATE RECEIVED: _____

VII. 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	
☐ Planning Board							X	X	
☐ Zoning Board			X	X	X	X	X	X	
☐ Sewer Authority							X	X	
☐ Water Authority							X	X	
☐ Fire Department					X	X	X	X	
☐ Police Department			X	X	X	X	X	X	
☐ Health Department					X	X			
☐ Soil Conservation							X	X	
☐ N.J. Dept. of Community Affairs	X	X	X	X	X	X			
☐ N.J. Department of Transportation	X	X	X	X	X	X			
☐ N.J. Dept. of Environmental Protect.	X	X	X	X	X	X			
☐ Utility Dig No.			X	X	X	X	X	X	
☐ Other									
☐									
☐									

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 EXPIRED
☐ Temporary Certificate of Occupancy	No. _____	_____	_____
☐ Temporary Certificate of Occupancy	No. _____	_____	_____
☐ Continued Certificate of Occupancy	No. _____	_____	
☐ Certificate of Occupancy	No. _____	_____	
☐ Certificate of Approval	No. _____	_____	

CONSTRUCTION PERMIT

Date Issued 7-30-92
Control #
Permit # 1608-92

IDENTIFICATION Block 725 Lot 1

Work Site Location Chamberlain Ave P.C. Contractor Allied Boiler Repair

Owner in Fee O.C. Va-Tech School Address

Address 1371 Long Lea Rd. Tele. ( ) Toms River, NJ

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 [X] PLUMBING [ ] OTHER

[ ] ELECTRICAL [X] FIRE PROTECTION

DESCRIPTION OF WORK:

Elec. to gas heat

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 $ 15,000.00

CONSTRUCTION OFFICIAL

PAYMENTS **(Office Use Only)**	
Building	
Plumbing	
Electrical	
Fire Protection	X
Other	
Other	X
DCA Training Fee	N
Cert. of Occ.	N
Other	
Total	
Check No.	
Cash	
Collected By:	

U.C.C. Form F-170A

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

PERMIT UPDATE

Date Update Issued 8-5-92
Control #
Permit # 1608-92
Date Permit Issued 7-30-92

IDENTIFICATION Block 725 Lot 1

Work Site Location [illegible]

Owner in Fee [illegible]

Address [illegible]

Tele. ( ) 120-1550

Contractor [illegible]

Address [illegible]

Tele. ( ) [illegible]

Lic. No. or Bldrs. Reg. No. [illegible]

Federal Emp. No. [illegible]

or Social Security No. [illegible]

Is hereby granted permission to perform the following work:

[✓] BUILDING [ ] PLUMBING [ ] Other

[ ] ELECTRICAL [ ] FIRE PROTECTION

DESCRIPTION OF WORK:

interior alteration

Estimated Cost of Work $ [illegible]

[illegible]
CONSTRUCTION OFFICIAL

PAYMENTS (Office Use Only)	
Building	
Plumbing	
Electrical	
Fire Protection	
Other	
Other	
DCA Training Fee	
Cert. of Occ.	
Other	
Total	
Check No.	
Cash	
Collected By:	

U.C.C. Form F-190A

1 WHITE—INSPECTOR COPY 2 CANARY—OFFICE COPY 3 PINK—OFFICE COPY 4 GOLD—APPLICANT COPY

BUILDING SUBCODE TECHNICAL SECTION

Date Received
Date Issued 8-5-92
Control #
Permit # 1608-92
update

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

Block _____ Lot _____
Work Site Location _____
_____
Owner in Fee _____
Address _____
_____
Tele. (____) _____
Contractor _____
Address _____
_____
Tele. (____) _____
Lic. No. or Bldrs. Reg. No. _____
Federal Emp. No. _____ or Social Security No. _____

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.

_____
Signature

D. TECHNICAL SITE DATA
DESCRIPTION OF WORK

JOB SUMMARY (Office Use Only)

PLAN REVIEW	Date	Initial
[ ] No Plans Req.		
[ ] All		
[ ] Footing		
[ ] Foundation		
[ ] Frame		
[ ] Other		
Joint Plan Review Required:		
[ ] Elec. [ ] Plumb. [ ] Fire		
SUBCODE APPROVAL		
[ ] CO [ ] CCO [ ] CA		
Date:		
Approved By:		

INSPECTIONS Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Footing				
Foundation				
Slab				
Frame				
Insulation				
Finishes:				
Energy				
Mechanical				
TCO				
Other				
Final				

B. BUILDING CHARACTERISTICS

Use Group Present _____ Proposed _____
Constr. Class Present _____ Proposed _____
No. of Stories _____
Height of Structure _____ Ft.
Area—Largest Floor _____ Sq. Ft.
Total Bldg. Area/All Floors _____ Sq. Ft.
Volume of Structure _____ Cu. Ft.
Total Land Area Disturbed _____ Sq. Ft.

Est. Cost of Bldg. Work:
1. New Bldg. $ _____
2. Alteration $ _____
3. Total (1+2) $ _____

TYPE OF WORK:
[ ] New Building
[ ] Addition
[ ] Alteration
  [ ] Roofing
  [ ] Siding
  [ ] Other _____
[ ] Demolition
[ ] Miscellaneous
  [ ] Fence _____ Height
  [ ] Sign _____ Sq. Ft.
  [ ] Pool
  [ ] Elevator
  [ ] Asbestos Abatement
  [ ] Other _____

(Office Use Only)
FEE
$ _____

Administrative Surcharge $ _____
Paid [ ] Check # _____ Minimum Fee $ _____
Collected by: _____ TOTAL FEE $ _____

U.C.C. Form F-110A 1 White = Inspector Copy 2 Canary = Office Copy 3 Pink = Office Copy 4 Gold = Applicant Copy

FIRE PROTECTION SUBCODE
TECHNICAL SECTION

Date Received
Date Issued 7-30-92
Control #
Permit # 1608-92

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

Block 725 Lot 1
Work Site Location Ocean Co. Vocational - Brick Center
Chambers Bridge Rd
Owner in Fee Ocean County Vo-Tech Bd. of Education
Address 137 Bey Lea Rd.
Toms River NJ 08753-4298
Tele. (908) 349-8567
Contractor Allied Boiler Repair Co.
Address 1520 Rt 37 West P.O. Box 1891
Toms River, NJ 08754
Tele. (908) 341-5907
Lic. No.
Federal Emp. No. 22-2800-830 or Social Security No.

B. FIRE PROTECTION CHARACTERISTICS

Use Group Present ______ Proposed ______
Constr. Class. Present ______ Proposed ______
Heating Systems [ ] New [ ] Existing
Type: [✓] Gas [ ] Oil [ ] Electrical [ ] Solar
[ ] Other 10 h.P. Fulton high Pressure boiler for dry Cleaning
Location: Boiler Rm
Total Est. Cost of Fire Prot. Work $ -0- [ ] Other

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Plumb. [ ] Elec.
[✓] Fire Plans Approved
Date: 7/22/92
Approved by:
SUBCODE APPROVAL:
[ ] CO [ ] CCO [✓] CA
Date: 12-5-92
Approved by:

INSPECTIONS: Type:	Failure	Failure	Approval	Initial
Suppression Test				
Fire Alarm Test				
Smoke Test				
Mechanical			9/23/92	
TCO				
Other				
Other				
Other				

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.

SIGNATURE

D. TECHNICAL SITE DATA

Description of Work

Water Supply Source
Method of Valve Supervision
Local Alarm Supervision
Central Supervision
Proprietary Supervision

Flammable Liquid Storage Tanks ( ) Capacity ____ Fuel ____
Combustible Liquid Storage Tanks ( ) Capacity ____ Fuel ____
L.P.G. Storage Tanks ( ) Capacity ____ Fuel ____
L.N.G. Storage Tanks ( ) Capacity ____ Fuel ____

	Number	FEE (Office Use Only)
Wet Sprinkler Heads		
Dry Sprinkler Heads		
TOTAL		
Smoke Detectors		
Heat Detectors		
TOTAL		
Stand Pipes		
Kitchen Hood Exhaust Systems		
Pre-Engineered Systems		
CO_2 Suppression		
Halon Suppression		
Foam Suppression		
Dry Chemical		
Wet Chemical		
Gas or Oil Fired Appliance	1	33-
OTHER		

Spot Sprinkler & Fire Detector Equip. to be reinstalled when work is completed & were needed in new offices.

Administrative Surcharge $
Paid [ ] Check # ______ Minimum Fee $
Collected by ______ TOTAL FEE $

U.C.C. Form F-140A

1 White=Inspector Copy
2 Canary=Office Copy
3 Pink=Office Copy
4 Gold=Applicant Copy

PLUMBING SUBCODE
TECHNICAL SECTION

Date Received
Date Issued 7-30-92
Control #
Permit # 1608-92

Elect to gas

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

Block 725 Lot 1
Work Site Location Ocean County Vo-Tech - Brick Center
Brick NJ
Owner in Fee Ocean County VO-Tech Board OF Education
Address 137 Bey Lea Rd
Toms River, NJ 08753-4296
Tele. (908) 349-8567
Contractor Allied Boiler Repair Co
Address 1520 Rt. 37 West P.O. Box 1891
Toms River, NJ 08754
Tele. (908) 341-5907
Lic. No.
Federal Emp. No. 22-2800-850 or Social Security No.

B. PLUMBING CHARACTERISTICS

Use Group Present ✓ Proposed
Building Sewer Size
Water Service Size
Estimated Cost of Plumbing Work $ 15,000.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Elec. [ ] Fire
[ ] Plumb. Plans Approved
Date: 7-21-92
Approved by:

SUBCODE APPROVAL:
[ ] CO [ ] CCO [X] CA
Approved by:
Date: 9-25-92

INSPECTIONS: Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Slab				
Rough				
Water				
Sewer				
Fixtures				
Gas Equipment				
Gas Final				
Solar				
TCO				

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.

William Boyle
Signature-Contractor Seal

[ ] Licensed Plumbing Contractor [✓] Exempt Applicant

D. TECHNICAL SITE DATA (List all fixtures.)

NO.	FIXTURE/EQUIPMENT	FEE (Office Use Only)
	Water Closet	
	Urinal/Bidet	
	Bath Tub	
	Lavatory	
	Shower	
	Floor Drain	
	Sink	
	Dishwasher	
	Drinking Fountain	
	Washing Machine	
	Hose Bibb	
(1)	Gas Piping	15-
	Fuel Oil Piping	
	Water Heater	
(1)	Steam Boiler	15-
	Hot Water Boiler	
	Sewer Pump	
	Interceptor/Separator	
	Backflow Preventer	
	Greasetrap	
	Water Cooled A/C or Refrigeration Unit	
	Sewer Connection	
	Water Service Connection	
	Gas Service Connection	
	Active Solar System	
	Other	10

Administrative Surcharge $
Paid [ ] Check # Minimum Fee $
Collected by: TOTAL $ 40-

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PLUMBING SUBCODE TECHNICAL SECTION

Date Received
Date Issued 7-30-92
Control #
Permit # 1608-92

Inst to gas

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

Block 725 Lot 1
Work Site Location Ocean County Un-Tech - Brick Center
Brick NJ
Owner in Fee Ocean County Un-Tech Board of Education
Address 137 Bailey Rd
Toms River, NJ 08753-4298
Tele. (908) 349-8567
Contractor Allied Boiler Repair Co
Address 1520 Rt. 37 West P.O. Box 1871
Toms River NJ 08754
Tele. (908) 341-5901
Lic. No.
Federal Emp. No. 22-2800-850 or Social Security No.

B. PLUMBING CHARACTERISTICS

Use Group Present ✓ Proposed
Building Sewer Size
Water Service Size
Estimated Cost of Plumbing Work $ 15,000.00

JOB SUMMARY (Office Use Only)

PLAN REVIEW:
[ ] No Plans Required
Joint Plan Review Required:
[ ] Bldg. [ ] Elec. [ ] Fire
[ ] Plumb. Plans Approved
Date: 7-21-92
Approved by: [illegible]

SUBCODE APPROVAL:
[ ] CO [ ] CCO [ ] CA
Approved by:
Date:

INSPECTIONS: Type:	Dates (Month/Day) Failure	Failure	Approval	Initial
Slab				
Rough				
Water				
Sewer				
Fixtures				
Gas Equipment				
Gas Final				
Solar				
TCO				

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.

[illegible]
Signature-Contractor Seal

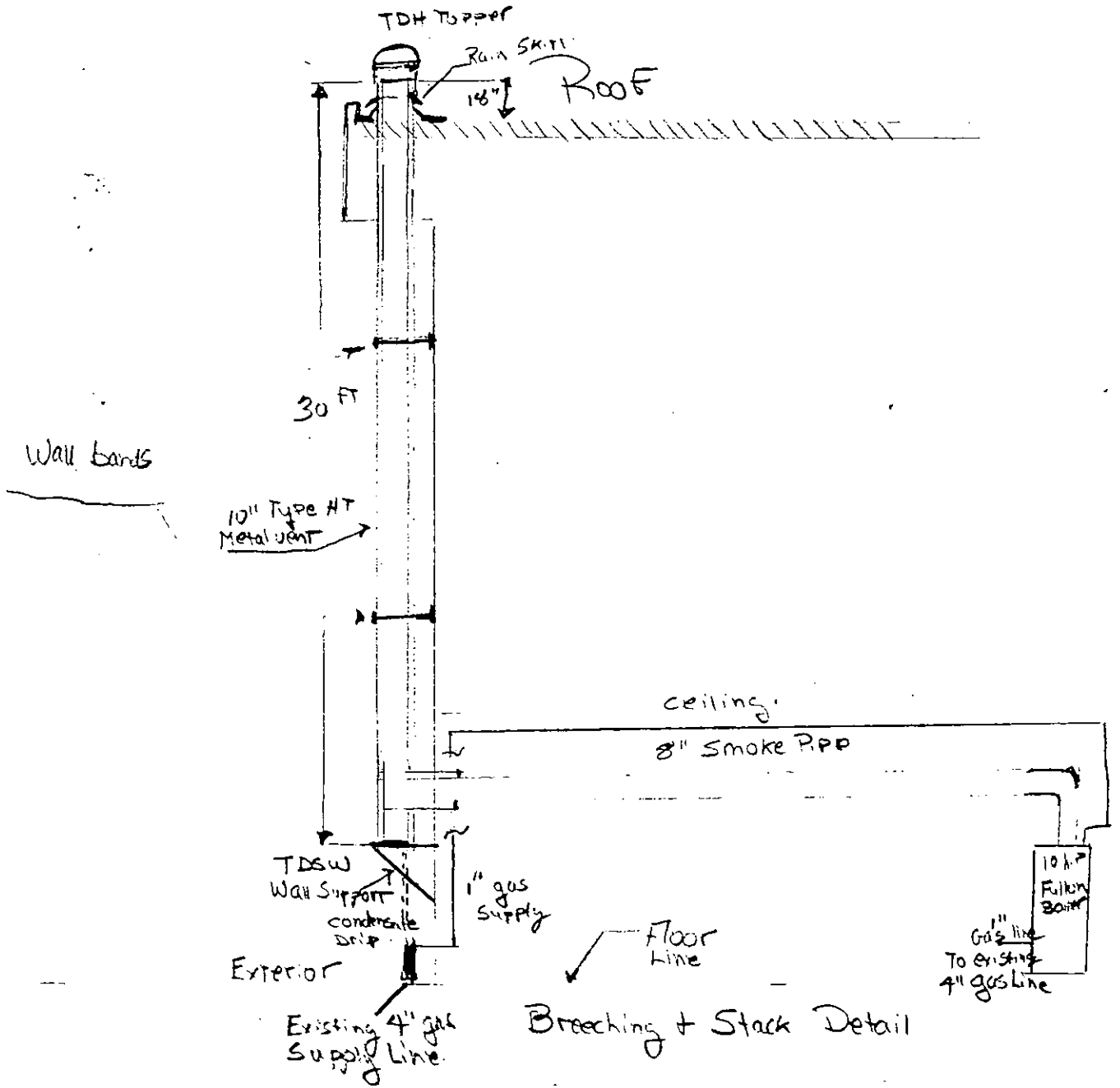
[ ] Licensed Plumbing Contractor [✓] Exempt Applicant

D. TECHNICAL SITE DATA (List all fixtures.)

NO.	FIXTURE/EQUIPMENT	FEE (Office Use Only)
	Water Closet	
	Urinal/Bidet	
	Bath Tub	
	Lavatory	
	Shower	
	Floor Drain	
	Sink	
	Dishwasher	
	Drinking Fountain	
	Washing Machine	
	Hose Bibb	
(1)	Gas Piping	15-
	Fuel Oil Piping	
(1)	Water Heater	
(1)	Steam Boiler	15-
	Hot Water Boiler	
	Sewer Pump	
	Interceptor/Separator	
	Backflow Preventer	
	Greasetrap	
	Water Cooled A/C or Refrigeration Unit	
	Sewer Connection	
	Water Service Connection	
	Gas Service Connection	
	Active Solar System	
	Other	1.

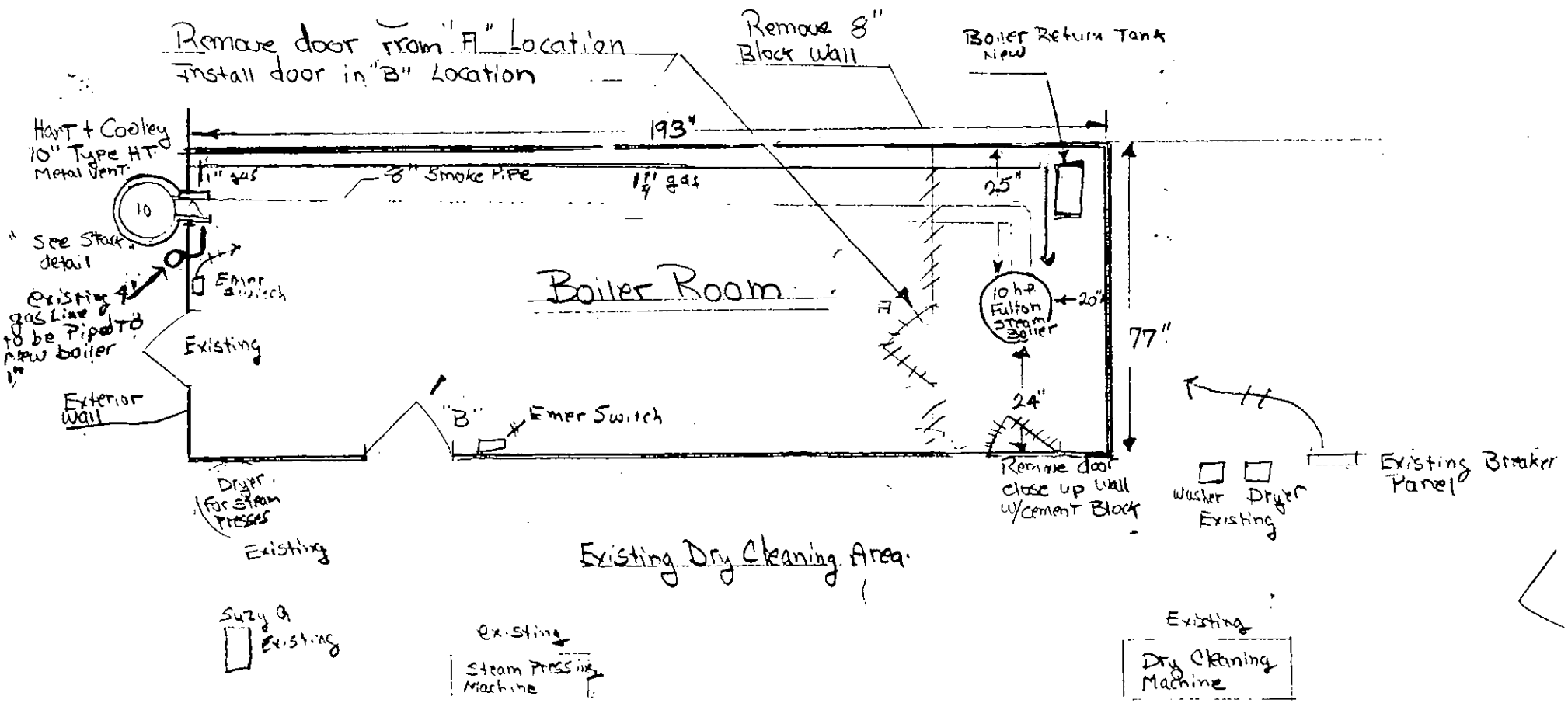
Administrative Surcharge $
Paid [ ] Check # Minimum Fee $
Collected by: TOTAL $ 40-

U.C.C. Form F-130A 1 White = Inspector Copy 2 Canary = Office Copy 3 Pink = Office Copy 4 Gold = Applicant Copy



Ocean Co. Vocational -- Brick Center
Chambers Bridge Rd
Brick, NJ

Sketch #101



Ocean County Vocational -- Brick Center
Chambers Bridge Rd.
Brick, N.J.

8/5/92
RJL

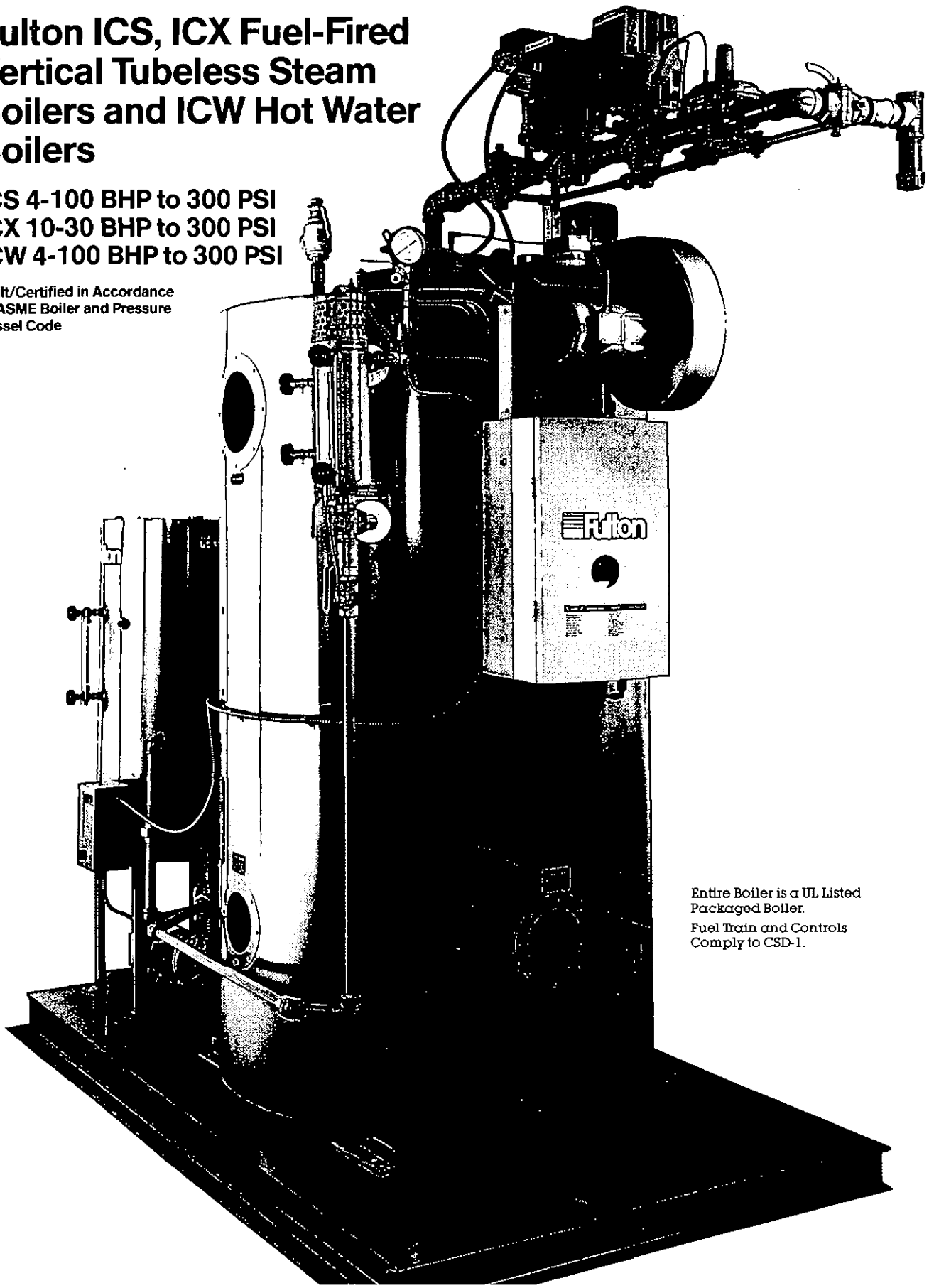
Fulton®

Industrial/Commercial Division
The Fulton Companies

Fulton ICS, ICX Fuel-Fired Vertical Tubeless Steam Boilers and ICW Hot Water Boilers

ICS 4-100 BHP to 300 PSI
ICX 10-30 BHP to 300 PSI
ICW 4-100 BHP to 300 PSI

Built/Certified in Accordance to ASME Boiler and Pressure Vessel Code



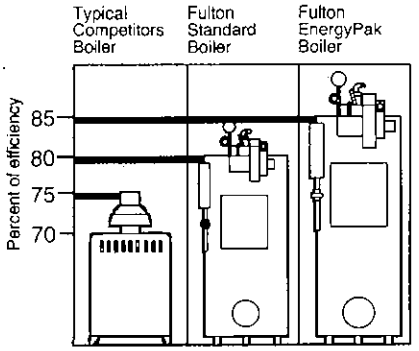
Entire Boiler is a UL Listed Packaged Boiler.

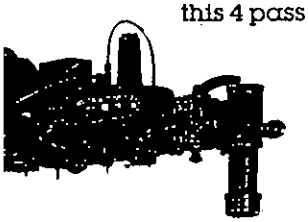
Fuel Train and Controls Comply to CSD-1.

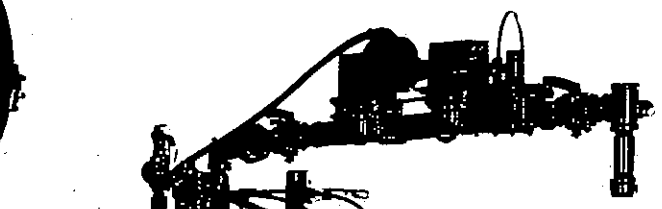
achieves efficiencies as high as 85%*. The ICX maintains the same top fired design as the standard boiler, but has a greater extension of flue gas traveling at higher velocities. More effective "scrubbing" of the hot gases results in higher efficiencies with this 4 pass boiler.

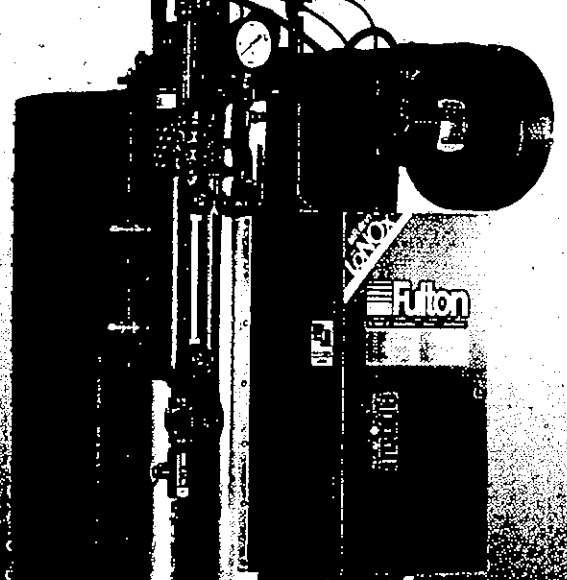
Dramatic stack temperature reductions.

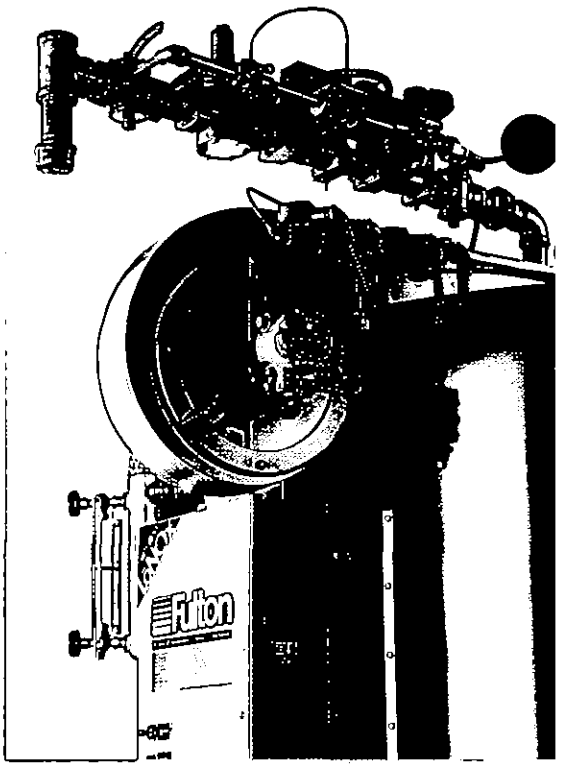
The Fulton ICX stack temperatures can be from 125-175 degrees F below standard two pass designs and have cut previous fuel bills in half!





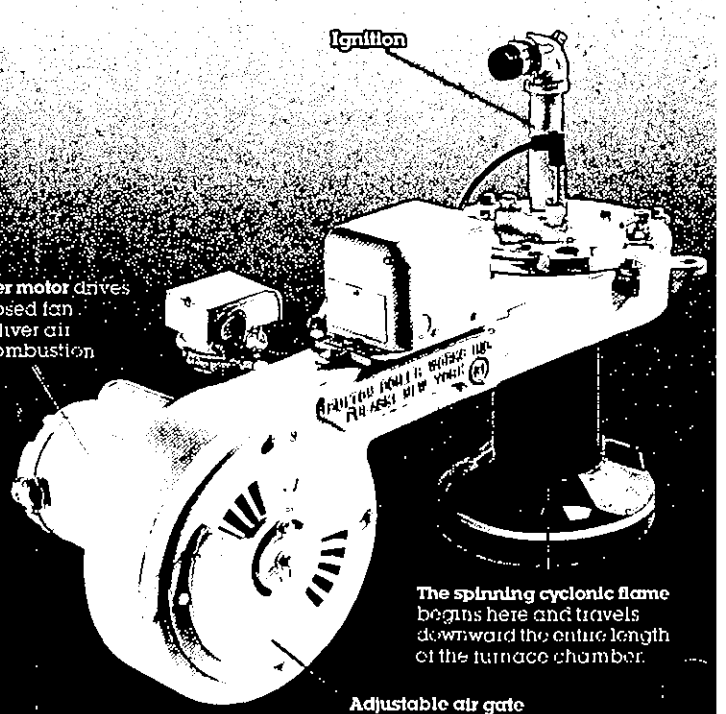






Fulton standard ICS and ICW steam and hot water boilers can be ordered with combination oil and gas capabilities or be converted at any time simply and economically.

All Fulton Boilers feature the Fulton designed and manufactured top mounted down-fired power burner.



tional polished stainless steel oilers. This boiler is a 10 BHP

*Efficiencies are based on fuel consumption to steam output (thermal efficiency) the true way to measure efficiency

No Tubes. No Coils. The Fulton Vertical Tubeless Boiler is the No. 1 Choice for the Process Industry

For over 40 years the Fulton vertical tubeless boilers have remained a compact trouble-free boiler supplying steam and hot water to virtually every type of industry imaginable.

The standard efficient ICS (steam) and ICW (hot water) Fulton boilers are available in 10 sizes ranging from 4 up to 100 BHP. Up to 80+% efficiency!

Every Fulton Boiler is built/certified to the ASME Code, and registered with the National Board. All Fulton Boilers are complete UL Listed Packaged Boilers. Not just the panel box, not just the burner, but the entire boiler. And . . . the Fulton Boiler is also CSA Approved.

Simplicity and reliability offer years of trouble-free operation.

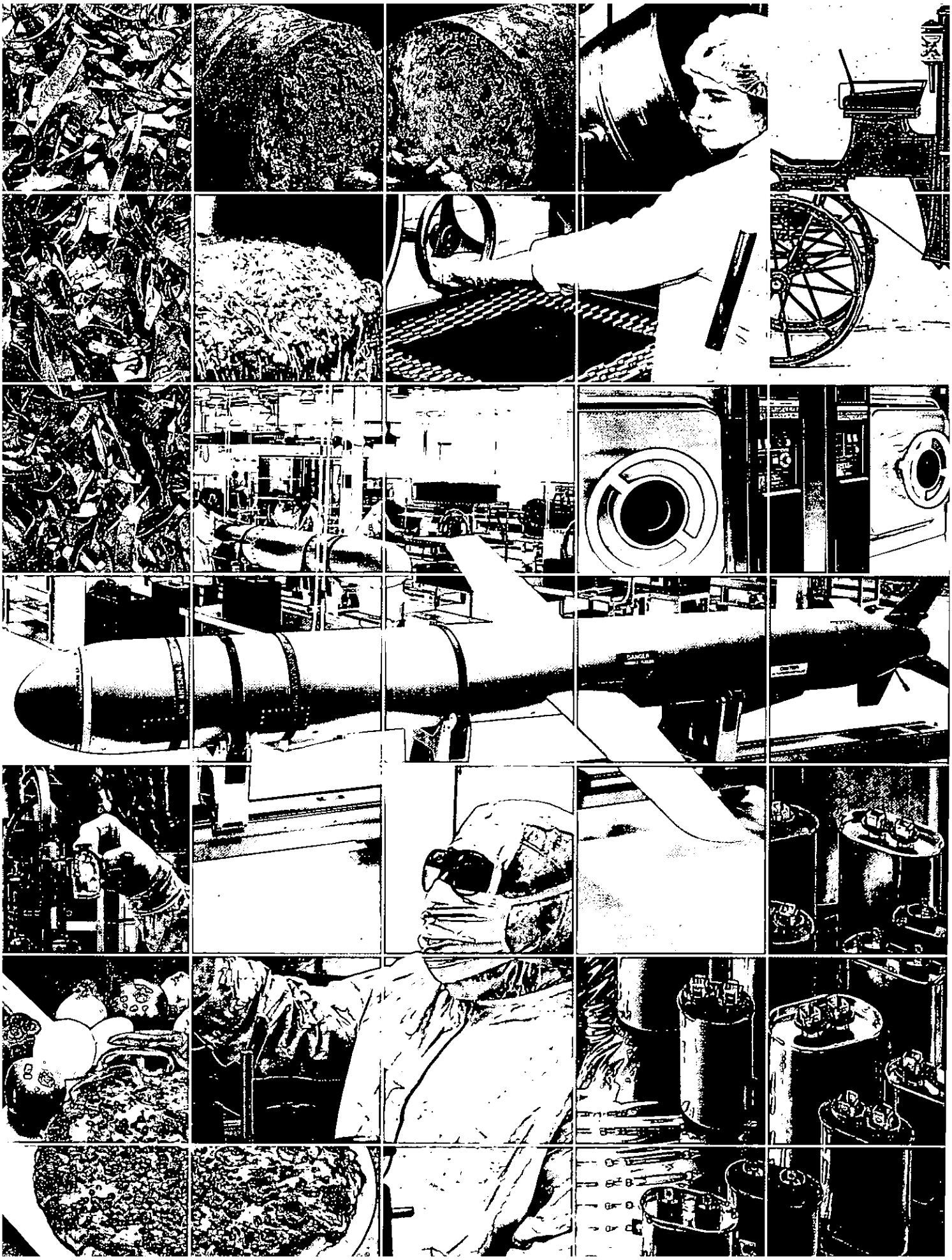
With no tubes or coils to scale up, rust or burn out a Fulton Boiler reduces plant operating costs by eliminating down time and expensive repairs.

The Fulton ICX (steam) vertical tubeless boiler offers even higher efficiencies than the standard ICS models.

Available in 10, 15, 20 and 30 BHP, gas fired only, and

All Fulton Boilers carry the Low Nox label, chemical and water treatment warning labels and have operational and warning lights to display the boiler functions at all times

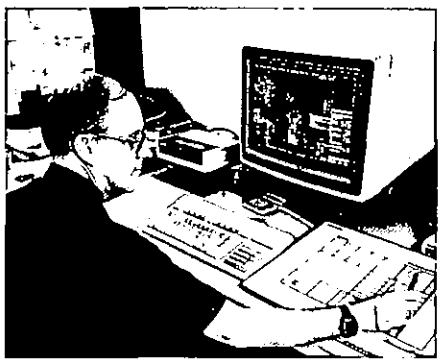
Fulton offers
jackets on a



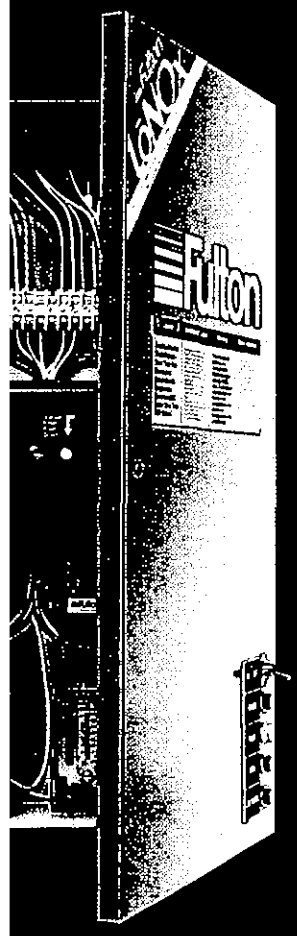
Complete factory fabrication can reduce expensive field installations

Fulton's engineering, drafting, and manufacturing capabilities can build just about anything around a customer's needs.

Fulton Boilers are applied to various industries: chemical and pharmaceutical, food processing, humidification applications, textiles, reclamation processes, adhesives, sterilization, plastics, metal finishing—anywhere steam and hot water is needed Fulton vertical tubeless boilers can be specified to do the job.



The factory built custom unit below features a complete skid-mounted pair of boilers, return system, blowdown, chemical feed and water softening system, plus a dual stack hooked to a heat reclaimer for preheating boiler feed water.



control panel box necessary operat- ments.

is standard indicating functions at all times.

safety all Fulton equipped with s protectors.

Fulton's unique features begin with simplicity

It starts with the basic design invented by Fulton in 1949.

The furnace (pressure vessel) is, simply stated, a "pipe within a pipe." The top mounted burner sends a spinning cyclonic flame into and down the center furnace chamber.

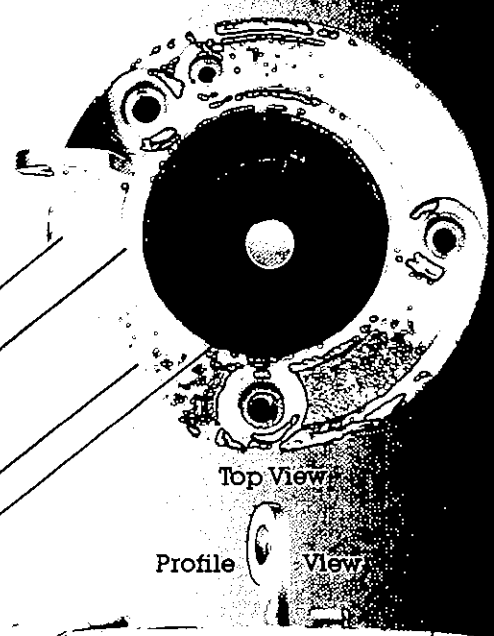
The "pipe within a pipe" design made from ASME approved steel. **No part of the pressure vessel is less than ¼" (6.35mm) thick.** The bigger the boiler, the thicker the pressure vessel.

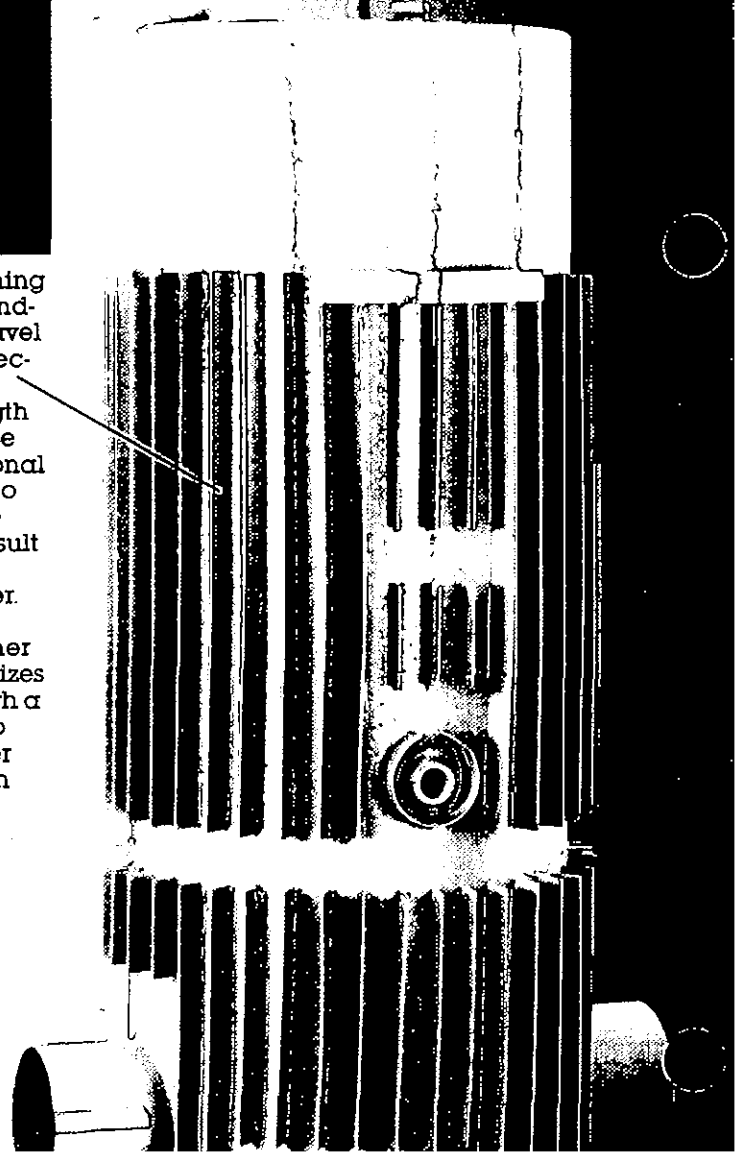
Water vessel surrounds furnace chamber.

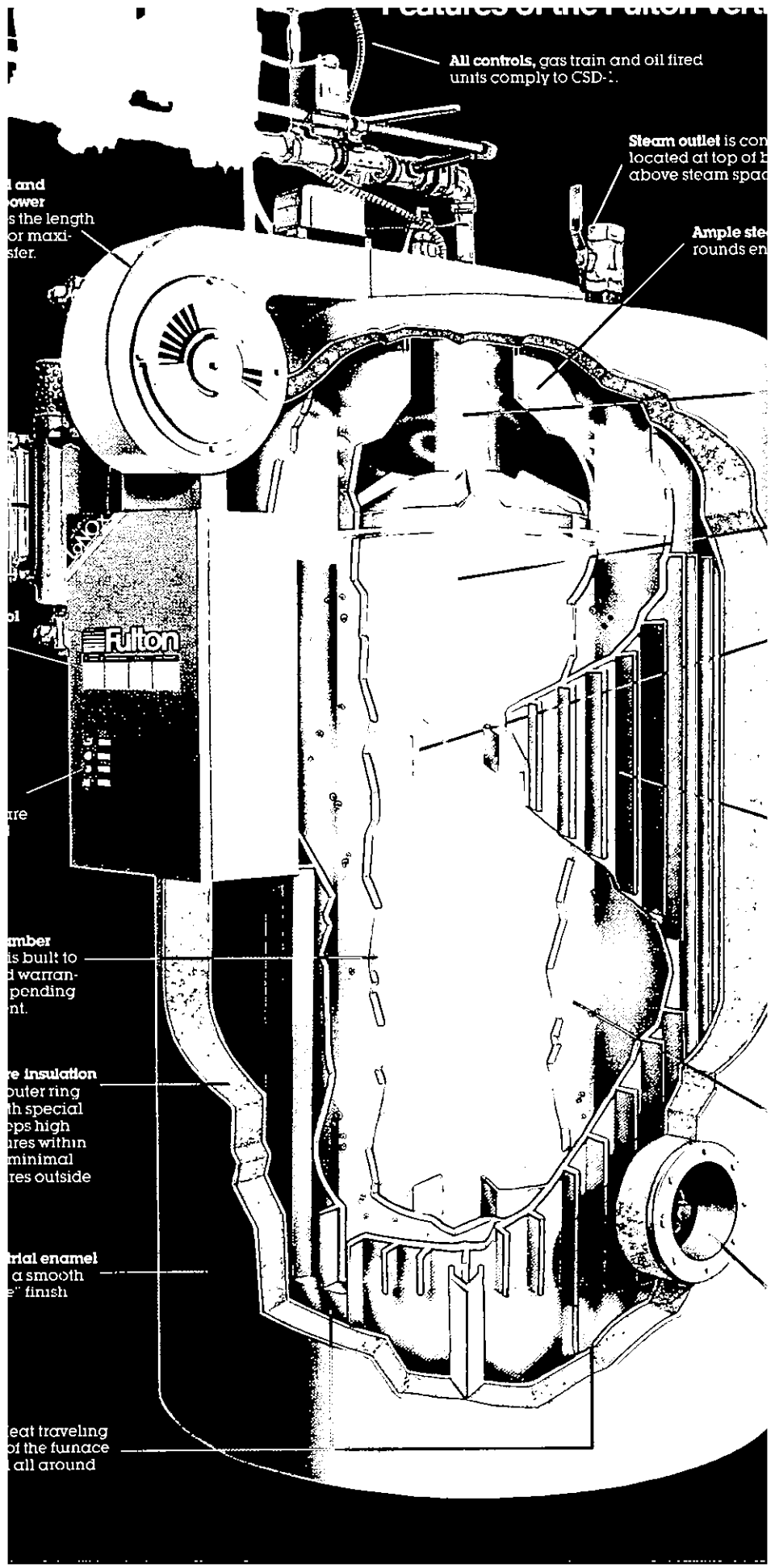
Top castable flame retainer.

The hot gases returning upward in the secondary flue passage travel over the heat convection fins which are welded the full length of the furnace. These fins transmit additional remaining heat onto the outer side of the water vessel. The result is efficient overall heating of the boiler.

The Fulton ICX higher efficiency boiler utilizes more passes through a unique fin design to achieve even higher overall heating with less stack heat loss.






Features of the Fulton Vert
All controls, gas train and oil fired units comply to CSD-
Steam outlet is con
located at top of b
above steam spac
Ample ste
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or maxi-
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Fulton
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is built to
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e insulation
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th special
eps high
ires within
minimal
res outside
rial enamel
a smooth
e" finish
eat traveling
of the furnace
all around

Specifications/Steam

Standard Model ICS		**4**	**6**	**10**	**15**	**20**	**30**	**50**	**60**	**80**	**100**
EnergyPak Model ICX				**10**	**15**	**20**	**30**				
Unit Size:	BHP	4	6	10	15	20	30	50	60	80	100
RATINGS* (Sea level to 3000 ft.)											
Output	1000 BTU/HR	134	201	335	502	670	1004	1674	2009	2678	3347
	1000 KCAL/HR	34	51	84	127	169	253	422	506	675	844
Output	1000 BTU/HR			345	517	690	1035				
	1000 KCAL/HR			87	130	173	260				
Steam Output	LB/HR	138	207	345	518	690	1035	1725	2070	2760	3450
	KG/HR	63	94	157	235	312	470	783	939	1252	1565
Steam Output	LB/HR			356	533	712	1066				
	KG/HR			162	242	323	484				
Approximate Fuel Consumption at Rated Capacity †											
Light Oil‡	GPH	1.5	2.4	3.4	5.25	7.6	10.5	15.6	18.0	26.0	31.4
	LPH	5.7	7.6	11.4	17	22.7	34	56.8	68.1	90.8	114
Propane Gas	FT^3/HR	70	105	170	250	330	500	830	1000	1330	1660
	M^3/HR	2	3	4.8	7.1	9.3	14.2	23.5	28.3	37.7	47
Natural Gas	FT^3/HR	175	260	420	630	840	1260	2100	2520	3360	4200
	M^3/HR	5	7.4	11.9	17.8	23.8	35.7	59.5	71.4	95	119
Natural Gas Boiler	IN	1	1	1	1	1.25	1.5	1.5**	2	2.5	3
Connection Size	MM	25	25	25	25	32	40	40	50	65	80
Burner	3450 RPM/60 CY					Gas Oil		Gas Oil	Gas Oil	Gas Oil	Gas Oil
Motor HP	2850 RPM/50 CY	1/3	1/3	1/3	1/3	1/3 3/4	3/4	1½ 2	1½ 2	2 3	3 3
Electric Power Requirements (in Amps)											
120V, 60 CY, 1 Phase		5.2	5.2	5.2	5.2	9.2	9.2	—	—	—	—
240V, 50, 60 CY, 1 Phase		2.6	2.6	2.6	2.6	4.6	4.6	Gas Oil 8.9 9.5	Gas Oil 8.9 9.5	Gas Oil 9.5 13.4	Gas Oil 13.4 13.4
208V, 50, 60 CY, 3 Phase		—	—	—	—	—	—	Gas Oil 4.4 5.7	Gas Oil 4.4 5.7	Gas Oil 5.7 9.7	Gas Oil 9.7 9.7
240V, 50, 60 CY, 3 Phase		—	—	—	—	—	—	Gas Oil 4.2 5.4	Gas Oil 4.2 5.4	Gas Oil 5.4 9.2	Gas Oil 9.2 9.2
480V, 50, 60 CY, 3 Phase		—	—	—	—	—	—	Gas Oil 2.1 2.7	Gas Oil 2.1 2.7	Gas Oil 2.7 4.6	Gas Oil 4.6 4.6

NOTE: High pressure boilers ordered with an extra pressure control for night heating have less than rated output while operating at low pressure.

Specifications/Hot Water

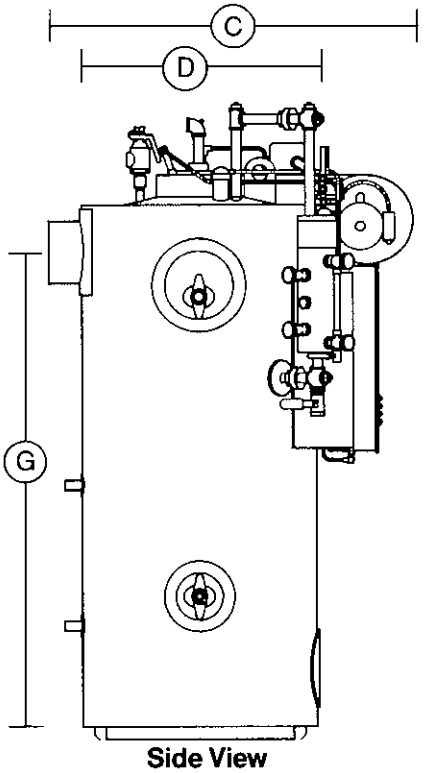
Standard Model ICW		**4**	**6**	**10**	**15**	**20**	**30**	**50**	**60**	**80**	**100**
Unit Size:	BHP	4	6	10	15	20	30	50	60	80	100
RATINGS* (Sea level to 3000 ft.)											
Output	1000 BTU/HR	134	201	335	502	670	1004	1674	2009	2678	3347
	1000 KCAL/HR	34	51	84	127	169	253	422	506	675	844
Approximate Fuel Consumption at Rated Capacity †											
Light Oil‡	GPH	1.5	2.4	3.4	5.25	7.6	10.5	15.6	18.0	26.0	31.4
	LPH	5.7	7.6	11.4	17	22.7	34	56.8	68.1	90.8	114
Propane Gas	FT^3/HR	70	105	170	250	330	500	830	1000	1330	1660
	M^3/HR	2	3	4.8	7.1	9.3	14.2	23.5	28.3	37.7	47
Natural Gas	FT^3/HR	175	260	420	630	840	1260	2100	2520	3360	4200
	M^3/HR	5	7.4	11.9	17.8	23.8	35.7	59.5	71.4	95	119
Natural Gas Boiler	IN	1	1	1	1	1.25	1.5	1.5**	2	2.5	3
Connection Size	MM	25	25	25	25	32	40	40	50	65	80
Burner	3450 RPM/60 CY					Gas Oil		Gas Oil	Gas Oil	Gas Oil	Gas Oil
Motor HP	2850 RPM/50 CY	1/3	1/3	1/3	1/3	1/3 3/4	3/4	1½ 2	1½ 2	2 3	2 3
Electric Power Requirements (in Amps)											
120V, 60 CY, 1 Phase		5.2	5.2	5.2	5.2	9.2	9.2	—	—	—	—
240V, 50, 60 CY, 1 Phase		2.6	2.6	2.6	2.6	4.6	4.6	Gas Oil 8.9 9.5	Gas Oil 8.9 9.5	Gas Oil 9.5 13.4	Gas Oil 13.4 13.4
208V, 50, 60 CY, 3 Phase		—	—	—	—	—	—	Gas Oil 4.4 5.7	Gas Oil 4.4 5.7	Gas Oil 5.7 9.7	Gas Oil 9.7 9.7
240V, 50, 60 CY, 3 Phase		—	—	—	—	—	—	Gas Oil 4.2 5.4	Gas Oil 4.2 5.4	Gas Oil 5.4 9.2	Gas Oil 9.2 9.2
480V, 50, 60 CY, 3 Phase		—	—	—	—	—	—	Gas Oil 2.1 2.7	Gas Oil 2.1 2.7	Gas Oil 2.7 4.6	Gas Oil 4.6 4.6

* All ratings from and at 212°F.
† Consumption based on: Light oil 140,000 BTU/G; Natural Gas 1000 BTU/ft^3; Propane 2530 BTU/ft^3
‡ For heavy oil and other fuels consult factory.
— Consult factory
** 2"/50mm IRI and CSA
Specifications are approximate. We reserve the right to change specifications.

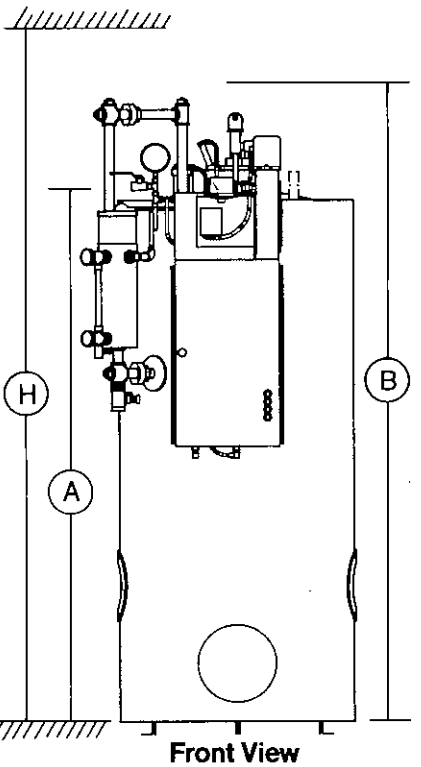
Dimensions and Weights

Models ICS, ICX and ICW all approximately same

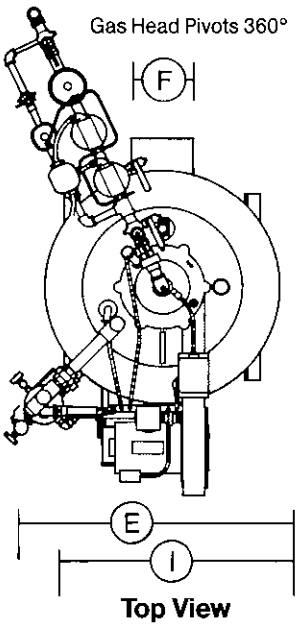
Standard Model ICS and ICW		**4**	**6**	**10**	**15**	**20**	**30**	**50**	**60**	**80**	**100**
EnergyPak Model ICX				**10**	**15**	**20**	**30**				
Unit Size:	BHP	4	6	10	15	20	30	50	60	80	100
Heights and Widths											
A Boiler Height	IN	47	57	63	69	72	82	87	93	93	99
	MM	1194	1448	1600	1753	1829	2083	2210	2362	2362	2515
B Boiler Height With Trim and Fuel Train Assembly	IN	64	74	80	86	90	100	105	117	117	124
	MM	1626	1880	2032	2184	2286	2540	2667	2925	2925	3150
C Overall Depth Stack to Burner Fan Housing	IN	43	45	46	47	59	68	78	78	93	99
	MM	1092	1143	1168	1194	1499	1727	1981	1981	2362	2515
D Boiler Diameter	IN	26	26	28	30	39	46	55	55	67	75
	MM	660	660	710	760	990	1170	1400	1400	1702	1905
E Overall Width With Water Column	IN	33	33	35	36	44	50	58	58	68	75
	MM	838	838	889	914	1117	1270	1473	1473	1727	1905
F Flue Outlet Diameter	IN	6	6	6	8	10	12	12	12	14	14
	MM	152	152	152	203	254	305	305	305	356	356
G To Center of Flue Outlet	IN	42	52	57	63	66	73	76	82	82	88
	MM	1070	1320	1450	1600	1675	1855	1930	2085	2085	2235
Minimum Clearances											
H Ceiling Height Required for Trim and Burner Removal	IN	72	81	86	94	96	106	114	120	120	125
	MM	1828	2057	2184	2387	2438	2692	2896	3048	3048	3175
I Opening Required for Boiler Installation With Water Column Removed	IN	26	26	28	30	39	46	55	55	67	75
	MM	660	660	710	760	990	1170	1400	1400	1702	1905
Front of Boiler	IN	41	41	41	41	41	41	41	41	41	41
	MM	1041	1041	1041	1041	1041	1041	1041	1041	1041	1041
Sides and Rear of Boiler	IN	18	18	18	18	18	18	18	18	18	18
	MM	457	457	457	457	457	457	457	457	457	457
Water Content											
	U.S. GAL	14	16	24	39	77	170	245	270	375	580
	LITERS	53	61	91	148	292	643	927	1022	1419	2195
Weights											
Approximate Shipping Weight	LB	1400	1700	2000	2300	3400	4700	7200	7700	10500	11600
	KG	640	770	910	1045	1545	2140	3270	3500	4770	5270



Side View



Front View



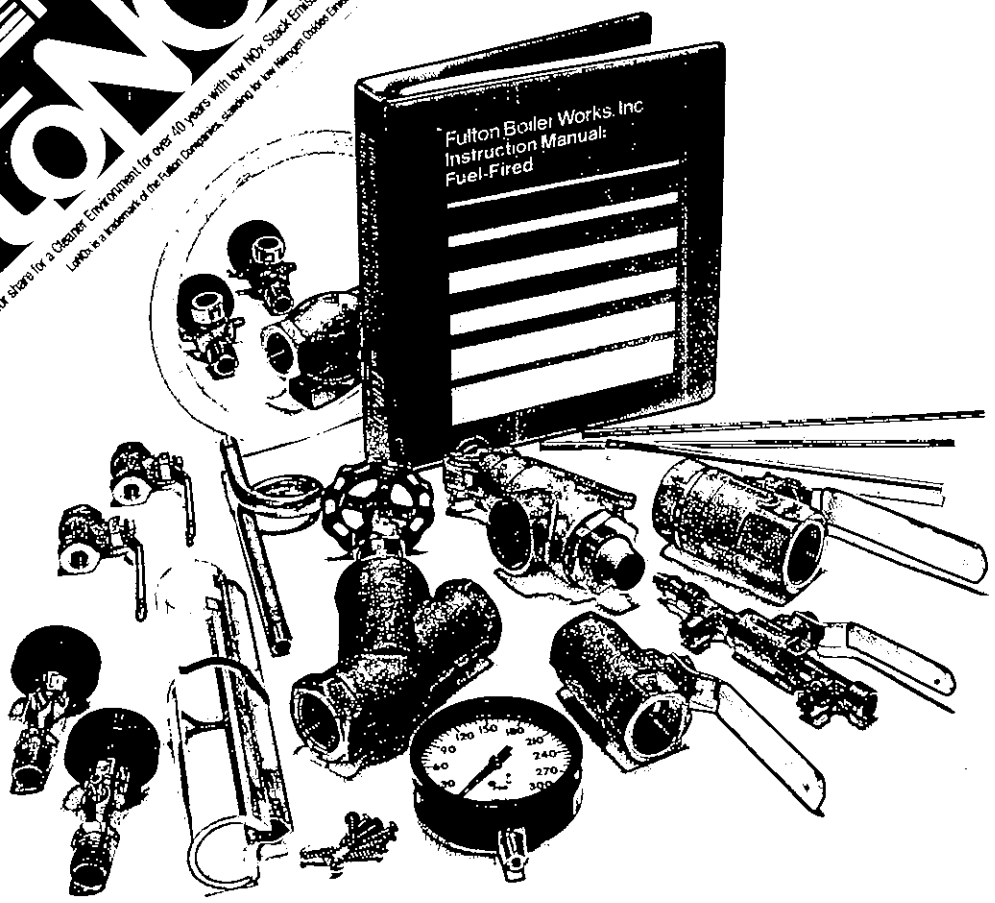
Top View

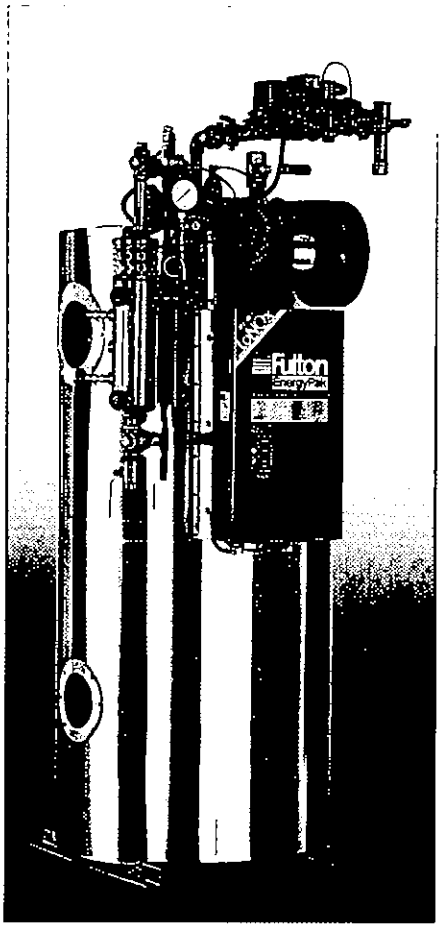
Dimensions are approximate. We reserve the right to change dimensions.

Fulton LoNOx

Doing our share for a Cleaner Environment for over 40 years with low NOx Stack Emissions Heat Transfer Equipment

LoNOx is a trademark of the Fulton Companies, standing for low Nitrogen Oxides Emissions





All Fulton Boilers are completely trimmed packaged boilers.

No additional fuel train items or electrical wiring is needed. Boiler is supplied with instruction manual, ready for quick installation by the Fulton representative.

Fulton UL Listed and ASME built boilers offer a 5 year (60 month) warranty on the pressure vessel.

The customer must return the warranty card and adhere to proper boiler care and water treatment specified by the Fulton representative.

Polished stainless jacket

A relatively inexpensive option for the customer who requires a "smart" look.
No matter if it's a stainless jacket or complete skid-mounted unit(s) with boiler, return system, blowdown, and any other special equipment, Fulton can build to any industrial process application.

Bulletin ICS PB-48116 Printed in USA 5M PP

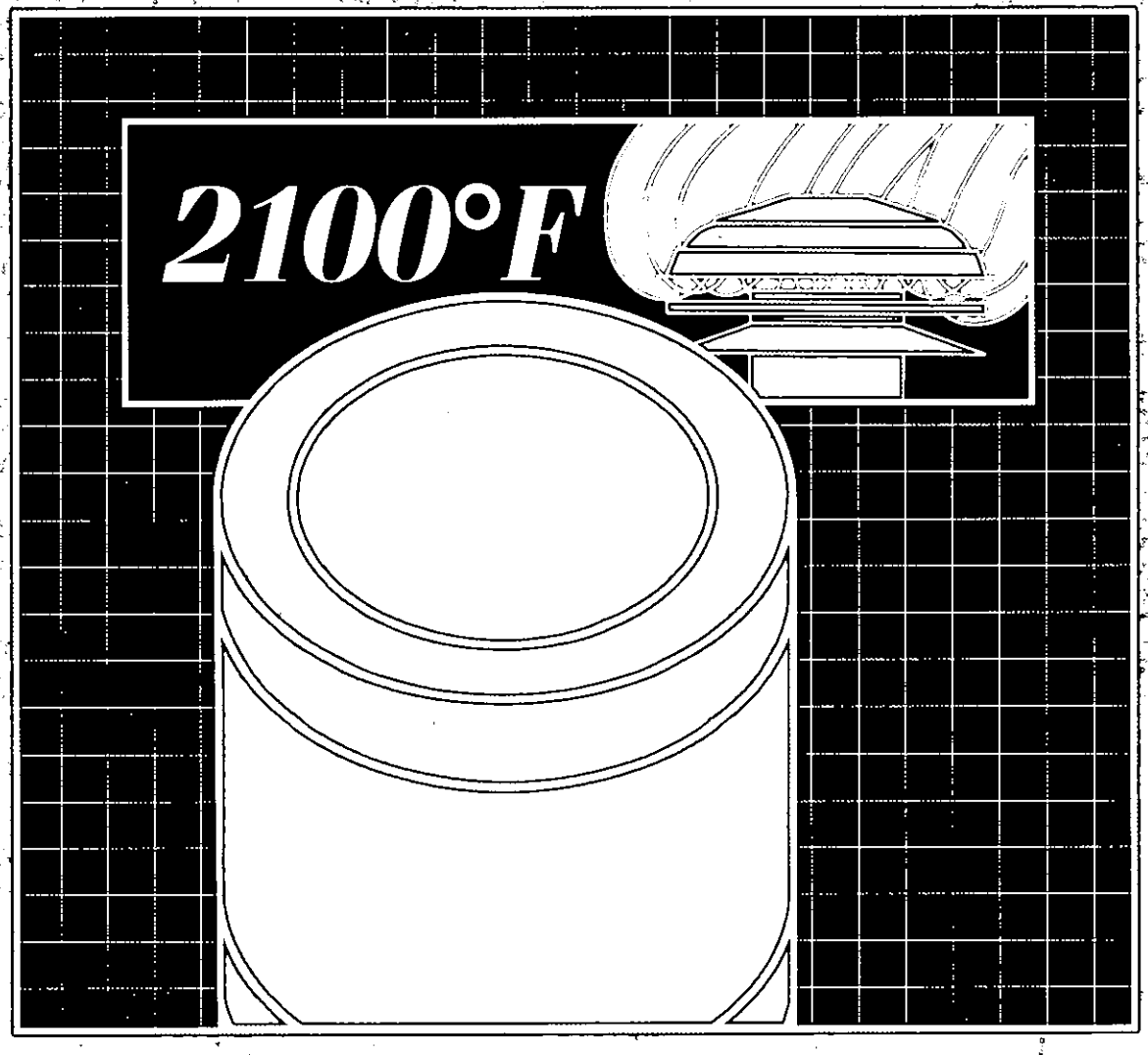
Fulton®

Port & Jefferson Streets, Box 257
Pulaski, New York USA 13142
Phone: (315) 298-5121
Telex: 646819 FULBOLWKS
Telefax: (315) 298-6390

Fulton Boiler Works, Inc.
Fulton Thermal Corporation
Fulton International
Fulton Boiler Works (Great Britain) Ltd
Fulton Boiler Works Canada, Inc.

Hart & Cooley®

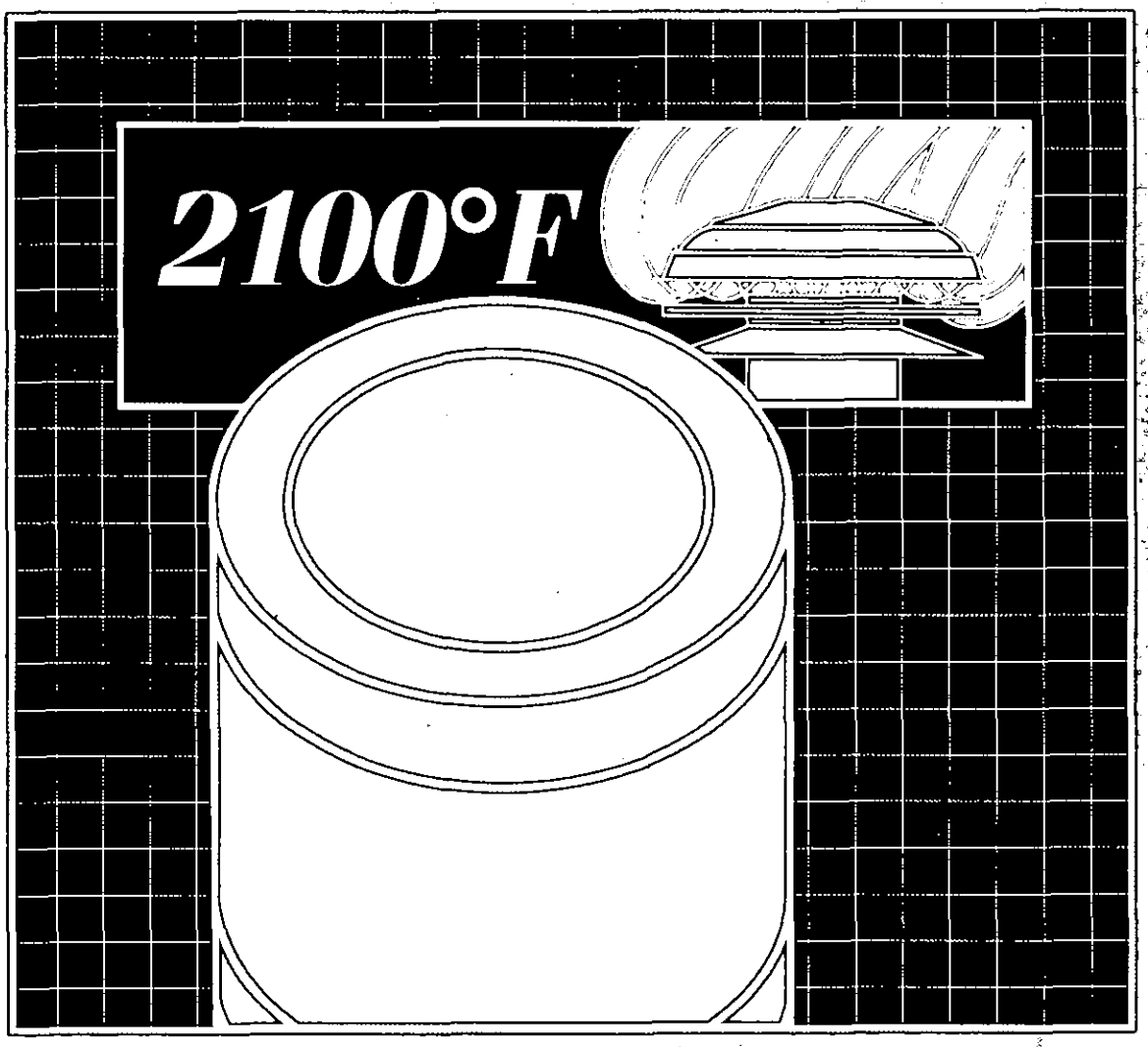
Metivent® Factory-Built Type HT Chimney Systems



Engineered Solutions Are OUR Business.

Hart & Cooley®

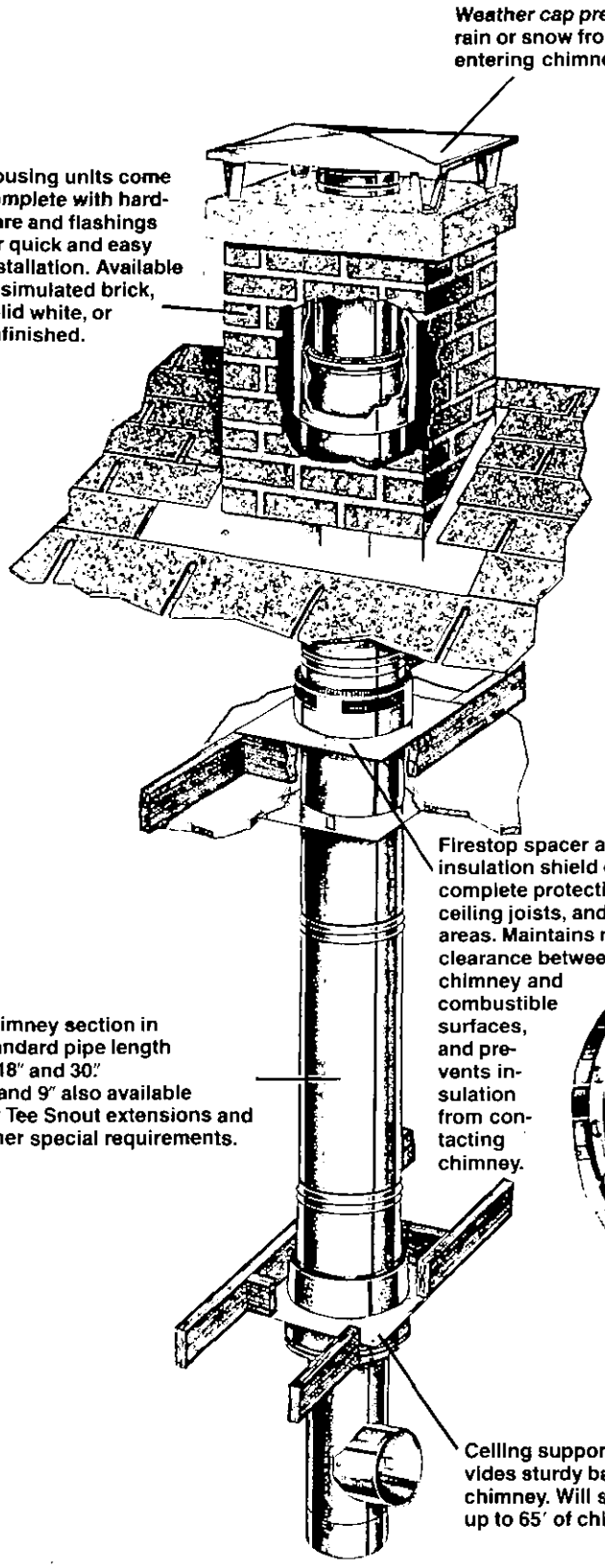
Metivent®
Factory-Built Type HT
Chimney Systems



Engineered Solutions Are OUR Business.

METLVENT® STAINLESS STEEL FACTORY-BUILT TYPE HT 2100° CHIMNEY SYSTEMS

Hart & Cooley®

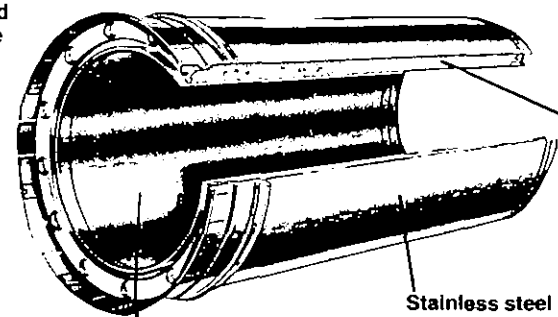


Metlvent® Model TD stainless steel chimney is designed for use with gas, oil or wood-fired appliances, including central furnaces, floor furnaces, steam and hot water boilers, fireplaces, unit heaters, water heaters, cooking and heating stoves, and low-heat commercial and industrial appliances.

To assemble, simply stack sections and lock securely in place with a simple slip ring. No screws, no twisting.

THERMAGARD® II Insulation reduces the total building space requirements for a chimney compared to masonry. (Both require 2" to combustibles by code.)

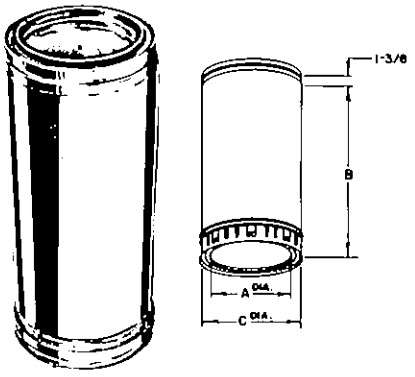
Metlvent® Model TD Chimney Pipe Construction Features



METLVENT® PIPE IS U.L. LISTED. Complies with the latest Underwriters' Laboratories Standard No. 103

METLVENT® FACTORY-BUILT TYPE HT 2100° CHIMNEY PIPE & FITTINGS

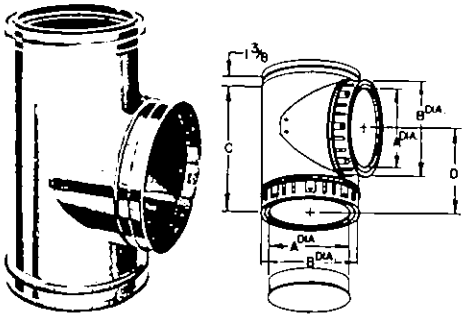
TDP* Chimney Pipe



6 pipe diameters 6", 7", 8", 10", 12", and 14". Pipe length, dimension "B" is installed length.

Catalog Number	Dim. A	Dim. B	Dim. C	Catalog Number	Dim. A	Dim. B	Dim. C
6TDP6	6	6	8	6TDP18	6	18	8
7TDP6	7	6	9	7TDP18	7	18	9
8TDP6	8	6	10	8TDP18	8	18	10
10TDP6	10	6	12	10TDP18	10	18	12
12TDP6	12	6	14	12TDP18	12	18	14
14TDP6	14	6	16	14TDP18	14	18	16
6TDP9	6	9	8	6TDP30	6	30	8
7TDP9	7	9	9	7TDP30	7	30	9
8TDP9	8	9	10	8TDP30	8	30	10
10TDP9	10	9	12	10TDP30	10	30	12
12TDP9	12	9	14	12TDP30	12	30	14
14TDP9	14	9	16	14TDP30	14	30	16

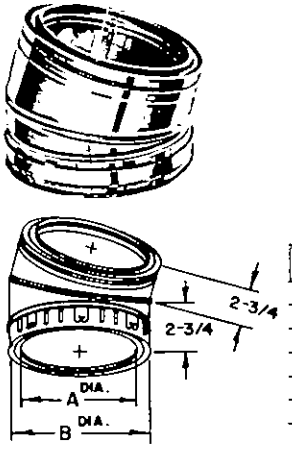
TDIT* Insulated Tee



The insulated tee may be used to support chimneys on non-combustible wall brackets or masonry piers. The maximum height chimney so supported is 45 feet. Removable tee cap for cleaning and inspection is provided.

Catalog Number	Dim. A	Dim. B	Dim. C	Dim. D
6TDIT	6	8	18	9
7TDIT	7	9	18	9
8TDIT	8	10	18	9
10TDIT	10	12	18	9½
12TDIT	12	14	18	9½
14TDIT	14	16	20	11

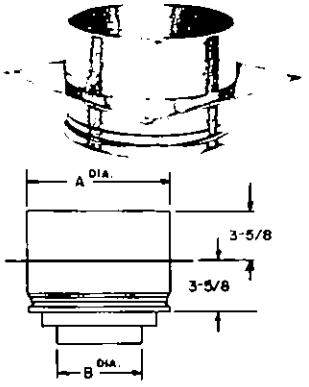
TDEL* Insulated 15° Elbow



Catalog Number	Dim. A	Dim. B
6TDEL	6	8
7TDEL	7	9
8TDEL	8	10
10TDEL	10	12
12TDEL	12	14
14TDEL	14	16

Elbows are used when it is necessary to offset the chimney to avoid framing members or to penetrate the roof closer to the ridge. Maximum allowable angle from vertical is 30° when fly ash producing fuel is used. Use only inside the structure because joints are not water tight.

TDSC* Ceiling Support

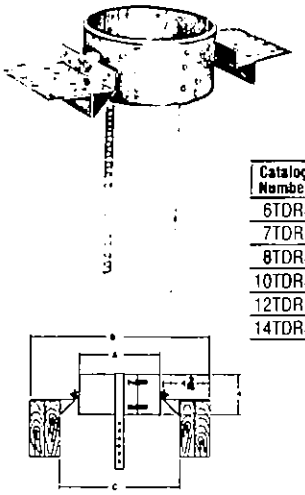


Packaged unit for supporting the chimney from floor or ceiling joists. Includes support sleeve and cone collar on sizes 6", 7", 8" and 10". Sizes 12" and 14" include the above plus a single wall pipe adaptor. (For support with integral trim see TDSCT page 4.) Will support up to 65 feet of chimney.

The TDSC should be used when it is necessary to extend insulated pipe below the support.

Catalog Number	Dim. A	Dim. B
6TDSC	10.000	6.250
7TDSC	11.000	7.250
8TDSC	12.000	8.250
10TDSC	14.000	10.000
12TDSC	16.000	12.000
14TDSC	18.000	14.000

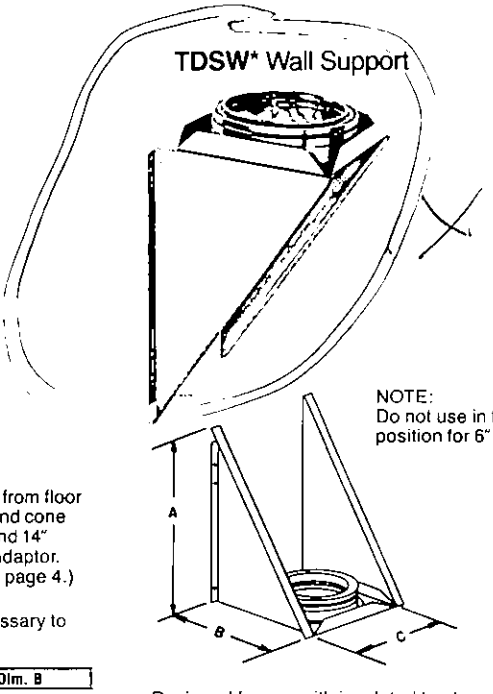
TDRS* Roof Support



Catalog Number	Dim. A	Dim. B	Dim. C
6TDRS	8	17⅞	12
7TDRS	9	18⅞	13
8TDRS	10	19⅞	14
10TDRS	12	21⅞	16
12TDRS	14	23⅞	18
14TDRS	16	25⅞	20

Ideal for free-standing fireplaces and installations in structures with open cathedral ceilings. Adjusts to all roof pitches. Will support up to 30 feet of chimney.

TDSW* Wall Support



NOTE:
Do not use in this position for 6" size.

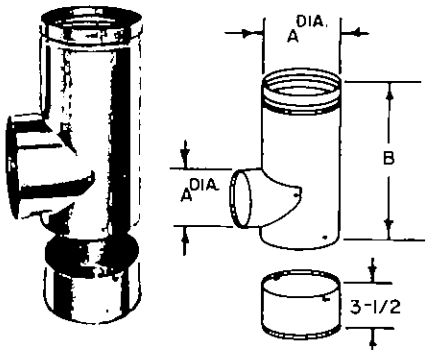
Designed for use with insulated tee to provide support for a chimney on interior or exterior installation. Brackets can be mounted below the plate (see photo) or above the plate (per drawing). Maximum chimney height which can be supported is 45 feet.

Catalog Number	Dim. A	Dim. B	Dim. C
6TDSW	18⅛	10⅝	9¼
7TDSW	20⅛	11⅝	10¼
8TDSW	21⅞	12⅝	11¼
10TDSW	25⅝	14⅝	13¼
12TDSW	28⅛	16⅝	15¼
14TDSW	32¼	18⅝	17¼

*DENOTES U.L. LISTING

METLVENT® FACTORY-BUILT TYPE HT 2100° CHIMNEY PIPE & FITTINGS

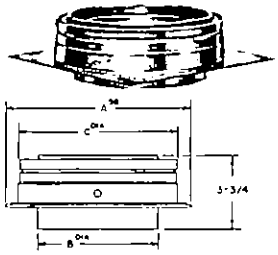
TDTS* Stainless Starter and Cleanout Tee



Needed on chimneys with open termination to prevent rain from damaging appliance. Drip cap can be removed for cleanout and inspection.

Catalog Number	Dim. A	Dim. B
6TDTS	6.000	14¼
7TDTS	7.000	15¼
8TDTS	8.000	16¼
10TDTS	10.000	18¼
12TDTS	12.000	20¼
14TDTS	14.000	22¼

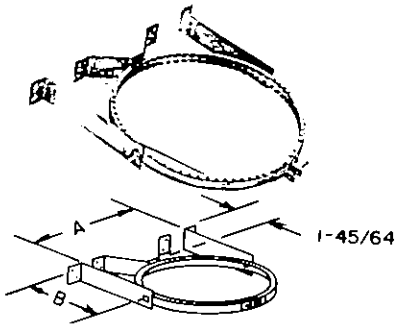
TDAP* Anchor Plate



Heavy gauge stainless steel plate provides a positive connection for chimney to a masonry fireplace. Pipe locks to top of smoke chamber connection. Also for use with a TDIT Insulated Tee when tee is supported on masonry piers.

Catalog Number	Dim. A	Dim. B	Dim. C
6TDAP	9¼	6.000	8.000
7TDAP	10¼	7.000	9.000
8TDAP	11¼	8.000	10.000
10TDAP	13¼	10.000	12.000
12TDAP	15¼	12.000	14.000
14TDAP	17¼	14.000	16.000

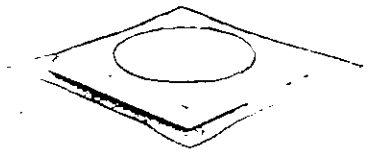
TDWB* Wall Band

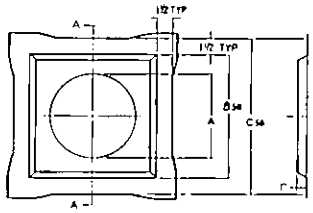


The wall band is used to stabilize the chimney along the wall and maintain proper clearance. Chimney should be supported at 8 foot intervals above starting point.

Catalog Number	Dim. A	Dim. B
6TDWB	8.586	6.000
7TDWB	9.586	6.500
8TDWB	10.586	7.000
10TDWB	12.586	8.000
12TDWB	14.586	9.000
14TDWB	16.586	10.000

TDFS Firestop Spacer

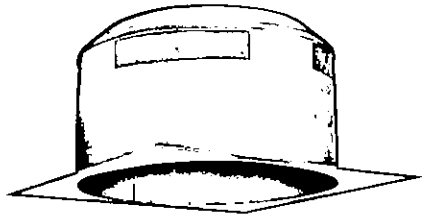




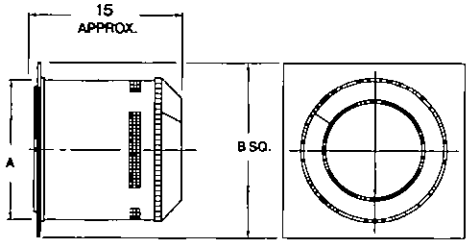
Offers complete protection at ceiling joists and maintains required clearance between the chimney and combustible surfaces. Also required where insulated pipe penetrates a framed wall.

Catalog Number	Dim. A	Dim. B	Dim. C
6TDFS	8⅛	12	15
7TDFS	9⅛	13	16¼
8TDFS	10⅛	14	17
10TDFS	12⅛	16	19¼
12TDFS	14⅛	18	21¼
14TDFS	16⅛	20	23¼

TDIS* Insulation Shield

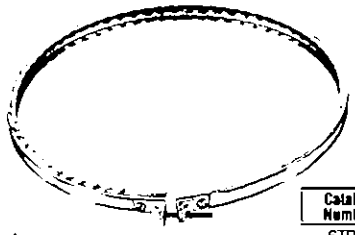


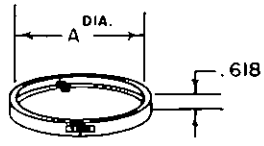
A spacer assembly intended for attic installation to prevent loose fill or other insulation from contacting the chimney section.



Catalog Number	Dim. A	Dim. B
6TDIS	12	15
7TDIS	13	16
8TDIS	14	17
10TDIS	16	19
12TDIS	18	21
14TDIS	20	23

TDSB* Support Band

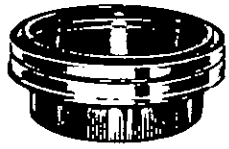


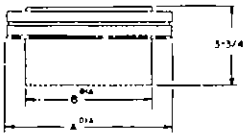


Catalog Number	Dim. A
6TDSB	8
7TDSB	9
8TDSB	10
10TDSB	12
12TDSB	14
14TDSB	16

Chimneys with round vent terminations extending 5 feet or more above the roof must be braced. The support band provides a means of attaching bracing to the pipe.

Pipe Adapter





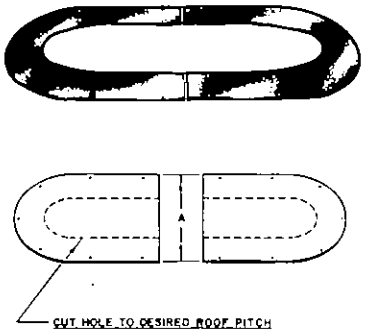
Catalog Number	Dim. A	Dim. B
6TDPA	8	6
7TDPA	9	7
8TDPA	10	8
10TDPA	12	10
12TDPA	14	12
14TDPA	16	14

When connecting single wall flue pipe to insulated pipe or tee an adapter is used. (Also supplied as part of ceiling support package with sizes 12 and 14).

*DENOTES U.L. LISTING

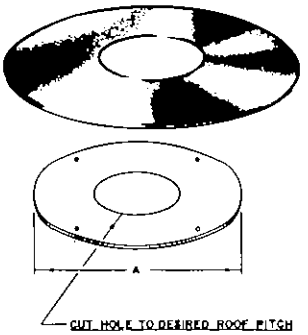
METLVENT® FACTORY-BUILT TYPE HT 2100° CHIMNEY PIPE & FITTINGS

TDTC Cathedral Trim Ring



For slopes above 12/12 to 36/12 pitch. Black finished two piece trim ring with template for cutting to required pitch.

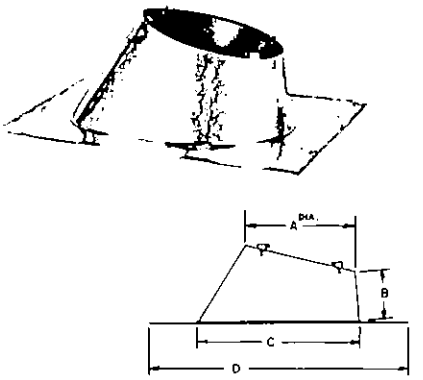
TDTR Cut-Out Trim Ring



TDTR Size
6
7
8
10

For slopes from flat to 12/12 pitch. Black finish one-piece trim ring with template for cutting to required pitch. The TDTR is used when a TDP chimney section is hung below the TDRS Roof Support. The TDTR will finish off the ceiling. To finish off the bottom of the pipe use a TDPT pipe trim.

TDF* Adjustable Flashing

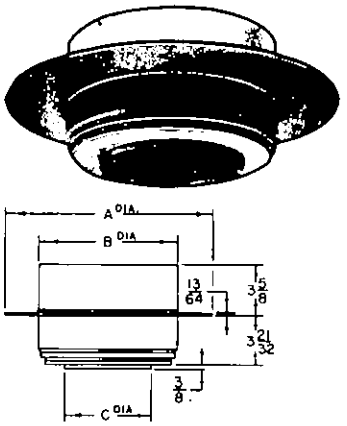


Flashing will adjust to suit roof pitch from flat to 6/12 pitch. Can be used with roof support (TDRS).

Catalog Number	Dim. A	Dim. B	Dim. C	Dim. D
6TDF	9 1/16	4.301	13.096	21 1/16 x 18
7TDF	10 1/16	6.402	15.673	24 1/16 x 20
8TDF	11 1/16	7.996	17.910	25 3/4 x 22 1/8
10TDF	13 1/16	7.948	20.093	28 1/8 x 24 1/16
12TDF	15 1/16	6.102	21.034	30 x 25 3/4
14TDF	17 1/16	6.102	23.261	32 9/16 x 28 1/8

Flashings for more than 6/12 pitch available on special order.

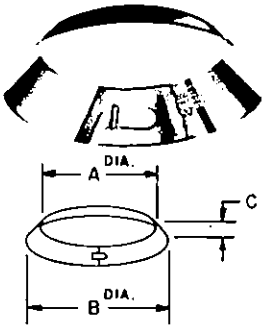
TDSCT* Support and Trim Package



Black finished, support and trim unit used at ceiling line where single wall pipe enters chimney. Will support 65 feet of chimney. Decorative trim plate covers hole in ceiling.

Catalog Number	Dim. A	Dim. B	Dim. C
6TDSCT	15.000	10.000	6.250
7TDSCT	17.000	11.000	7.250
8TDSCT	19.000	12.000	8.250
10TDSCT	21.000	14.000	10.250

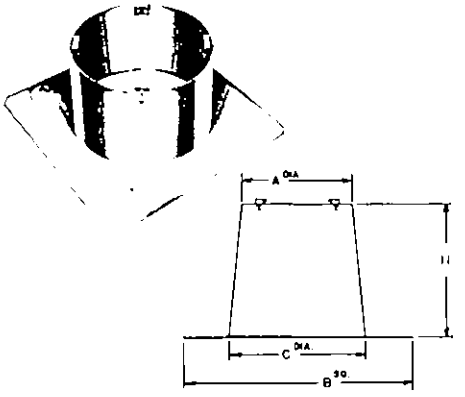
TDS* Storm Collar



Storm collar is installed just above flashing. Use Metlvent ® sealer or caulking material for watertight installation.

Catalog Number	Dim. A	Dim. B	Dim. C
6TDS	8	10 1/8	1 7/16
7TDS	9	11 1/8	1 7/16
8TDS	10	12 1/8	1 7/16
10TDS	12	15 1/2	1 3/4
12TDS	14	17 1/8	1 15/16
14TDS	16	20 1/4	2 1/8

TDTF* Tall Cone Flashing



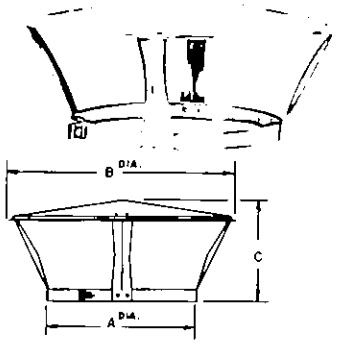
For flat roofs 11" high cone provides protection against water or snow accumulation around chimney.

Catalog Number	Dim. A	Dim. B	Dim. C
6TDTF	9 1/16	18 9/16	11
7TDTF	10 1/16	24 5/64	16
8TDTF	11 1/16	24 5/64	16
10TDTF	13 1/16	24 5/64	16
12TDTF	15 1/16	28 3/32	19 5/16
14TDTF	17 1/16	28 3/32	19 5/16

*DENOTES U.L. LISTING

METLVENT® FACTORY-BUILT TYPE HT 2100° CHIMNEY PIPE & FITTINGS

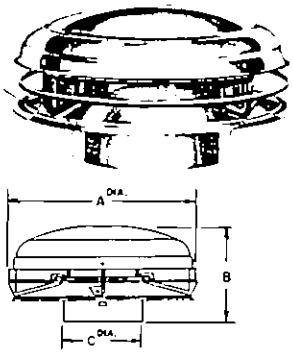
TDWP* Partial Protection Cap



Offers partial protection against entrance of rain on 10", 12" and 14" diameter chimneys terminated with housing. Requires a stainless steel starter tee (TDTS) at bottom of chimney.

Catalog Number	Dim. A	Dim. B	Dim. C
10TDWP	11 1/32	17	7 19/32
12TDWP	13 1/32	20	9 1/32
14TDWP	15 1/32	24	10 23/32

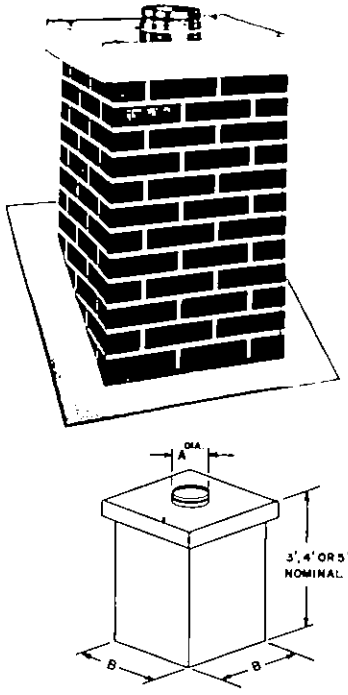
TDC* Topper



For terminating a chimney without a housing. In this type of installation, a storm collar and flashing are used at point where chimney penetrates the roof. Topper prevents entrance of rain, snow, debris and chimney nesting birds. Topper snaps on pipe.

Catalog Number	Dim. A	Dim. B	Dim. C
6TDC	14 1/8	7 1/4	6
7TDC	15 1/8	7 1/32	7
8TDC	16 1/8	7 9/16	8
10TDC	23	9 1/2	10
12TDC	25	9 7/8	12
14TDC	27	10 1/4	14

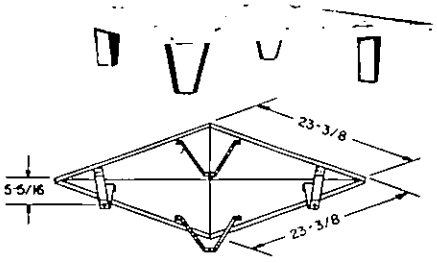
TDH* Housing



Housing panels are stucco embossed aluminum available in red brick (RB) and solid white (W) finishes. The dome is aluminum in light gray. Order desired cap separately. TDW Weather Cap or TDWP Partial Protection Cap.

Catalog Number	Dim. A	Dim. B
6TDH	6.500	18 1/4
7TDH	8.000	18 1/4
8TDH	9.000	18 1/4
10TDH	11.000	24
12TDH	13.000	24
14TDH	15.000	24

TDW* Weather Cap



Offers full protection from rain, snow and debris. Constructed of stainless steel painted light gray to match the housing dome. For chimney sizes 6", 7" and 8" only.

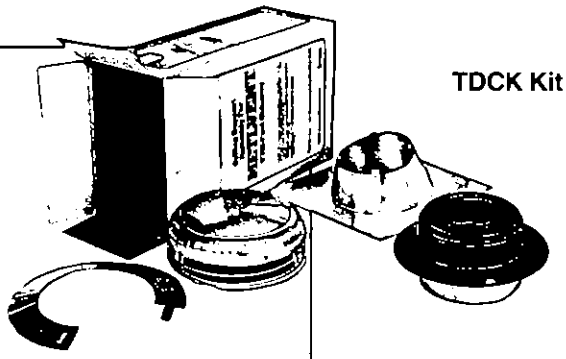
TDCSA Topper (with Spark Arrester)

Note: TDSA Spark Arrester screen only

*DENOTES U.L. LISTING

Hart & Cooley®

METLVENT® KITS
TDCK, TDWK
METLVENT® BLACK CONNECTOR PIPE
MBP, MBS, MBE, MBT, MBK



TDCK Kit

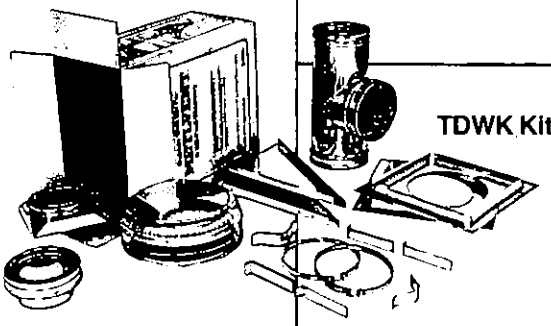
Kit 6TDCK No. 18040 for 6" dia. pipe 9 lbs.

Kit 8TDCK No. 18240 for 8" dia. pipe 13 lbs.

For use inside the house (through the ceiling) installation. Contents include these METLVENT® all-fuel components:

TDC Topper
TDS Storm Collar
TDF Roof Flashing
TDSCT Ceiling Support/Trim Package
One pkg. caulk

Note: Installation also requires attic insulation shield TDIS and firestop(s) TDFS.



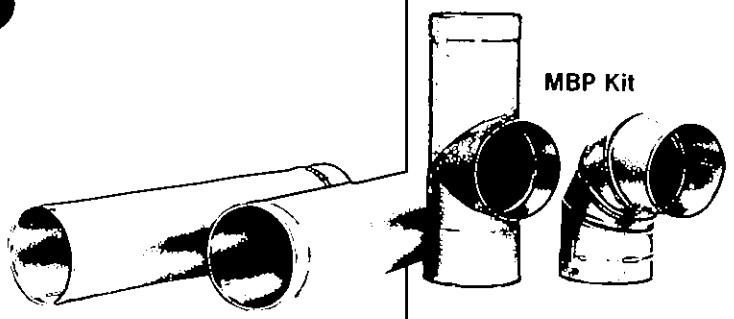
TDWK Kit

Kit 6TDWK No. 18042 6" dia. pipe 29 lbs.

Kit 8TDWK No. 18242 8" dia. pipe 37 lbs.

For use outside the house (outside wall) installation. Contents include these METLVENT® all-fuel components:

TDPA Pipe Adapter
TDC Topper
TDSW Wall Support
TDFW Fire Stop Spacers
TDWB Wall Bands
TDIT Insulated Tee



MBP Kit

Perfect companions for any wood stove installation!

Item	Order No.	Description	Pcs/Case	Wt.
6MBP24	19002	24" Connector Pipe	6	45
6MBS24	19006	24" Slip Pipe	6	59
6MBE	19008	90° Adjustable Elbow	6	26
6MBT	19009	Tee with cap	6	22
8MBP24	19102	24" Connector Pipe	6	59
8MBS24	19106	24" Slip Pipe	6	59
8MBE	19108	90° Adjustable Elbow	6	39
8MBT	19109	Tee with cap	6	30

Note: Shipped in case lots only

24-gauge steel. Single wall. Matte black, heat-resistant coating. Available in 6" or 8"-diameter kits.

MBP Connector Pipe
MBS Slip Pipe
MBT Tee with Cap
MBE 90° Elbow

MBK Kit

Item	Order No.	Contents	Wt.
6MBK	19010	2 — 6MBP24 Connector pipes 1 — 6MBS24 Slip Pipe 10 — Screws	11
8MBK	19110	2 — 8MBP24 Connector Pipes 1 — 8MBS24 Slip Pipe 10 — Screws	14

Each kit contains two sections of 24"-long connector pipe, one section of 24"-long slip pipe. Matte black heat resistant coating. Conveniently packaged with instructions.

Available in 6" or 8"-diameter kits.

MBS24 Slip Pipe
MBP24 Connector Pipe

ENGINEERING DATA

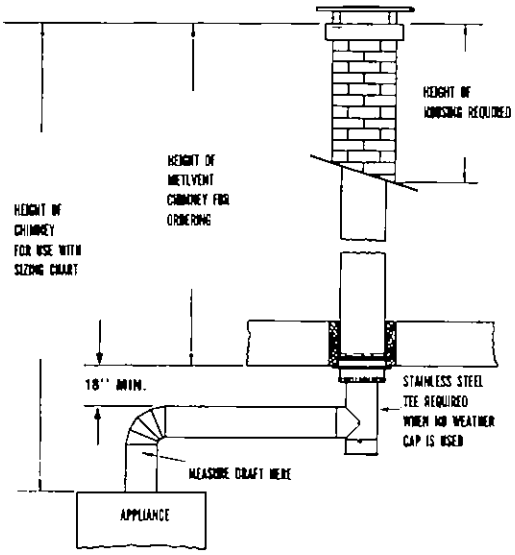
The data below is based on the following conditions:

☐ Flue gas temperature rise of 600° F. at 9% CO_2.

☐ Connector length allowance is given in table below.

☐ Number of turns shown in graph are for connector pipe. Two elbows or a tee and an elbow connected to each other must be considered three turns.

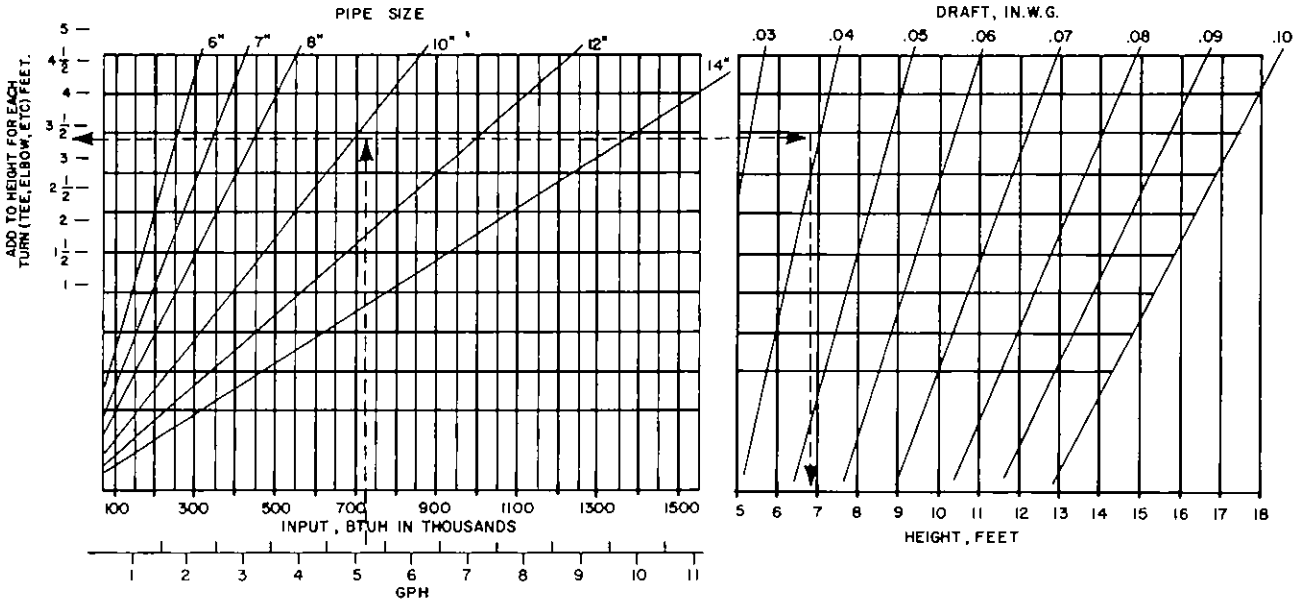
The draft shown at the top of the graph is the draft at the flue collar (see diagram). The relation between outlet draft and overfire draft is affected by heat ex-changer design. When in doubt consult the appliance manufacturers.



Connector Length Allowance

Size	6	7	8	10	12	14
Max. length allowed for in tables	8	10	12	15	18	23
Add to chimney height for each additional foot, inches.	5	4	3	2½	2¼	2

Chimney Sizing for Single Appliances
Minimum Chimney Heights



Example

GIVEN:

☐ Input is 5GPH or 700,000 Btuh.

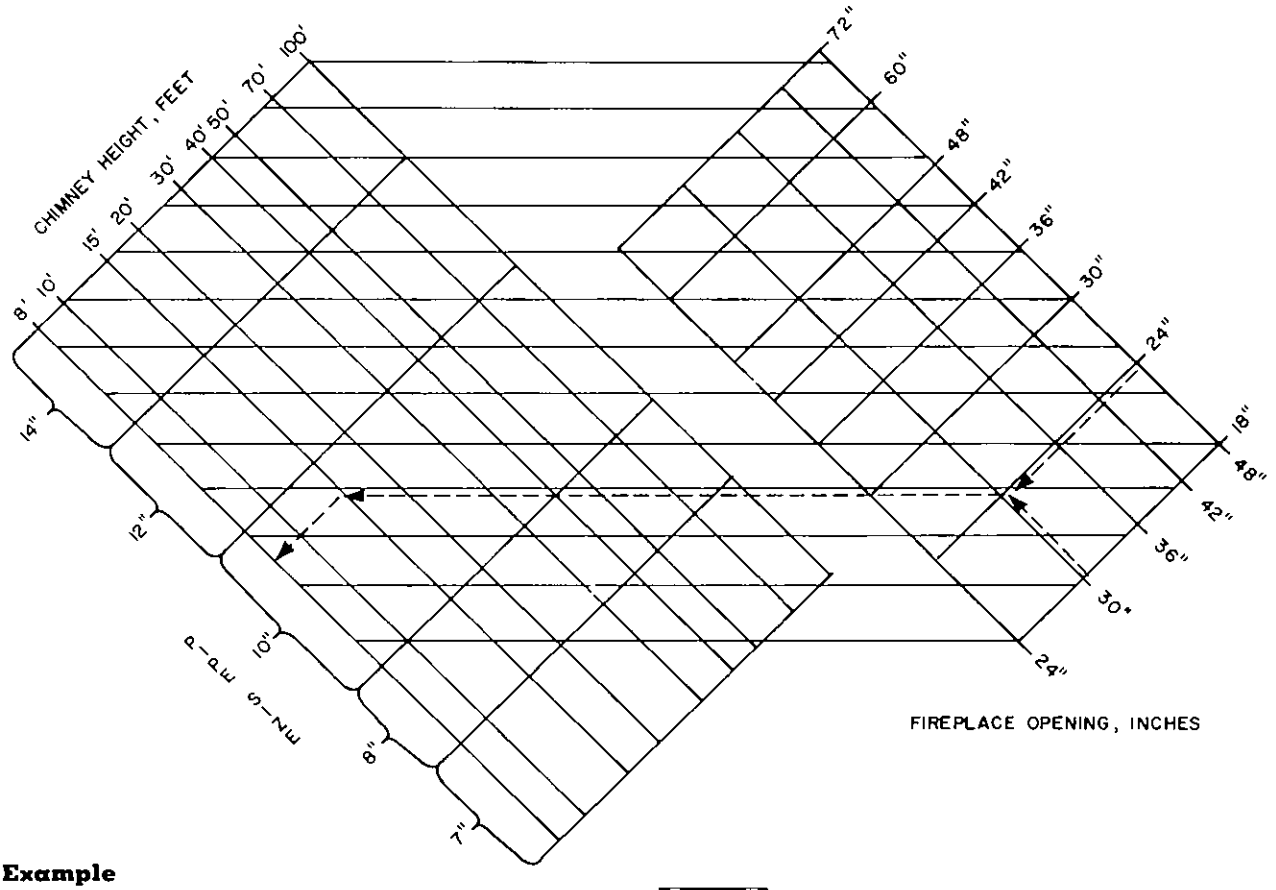
☐ Draft required at flue collar given by furnace manufacturer as 0.04 inches water.

☐ Flue collar size is 10 inch and a tee is required at the bottom.

Proceed vertically upward from 700M BTUH to intersect 10" flue size then horizontally to right to intersect 0.04 inches water draft, then vertically downward to read approximately 7 feet of height required. This must then be adjusted for the number of turns existing in the chimney system. Repeat from starting point moving vertically upward to intersect 10" flue size now horizontally to the left to read approximately 3½ feet to be added for each tee or elbow. With one tee the total required height is 7 + 3½ = 10½ feet. By increasing the flue size by one size, the required height can be reduced slightly. Checking 12" size will show 6½ + 1½ = 8 feet.

ENGINEERING DATA

Chimney Sizing for Fireplaces



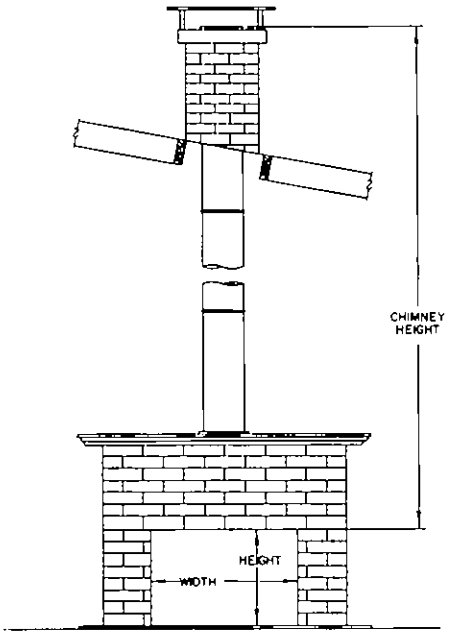
Example

GIVEN:

☐ Fireplace opening size 30" x 24".

☐ Desired height from top of opening to top of chimney 15 feet.

At right-hand section of chart find intersection of 30" and 24" lines. Proceed horizontally to left until 15 ft. height line is intersected. This intersection occurs within the limits of a 10" chimney size.



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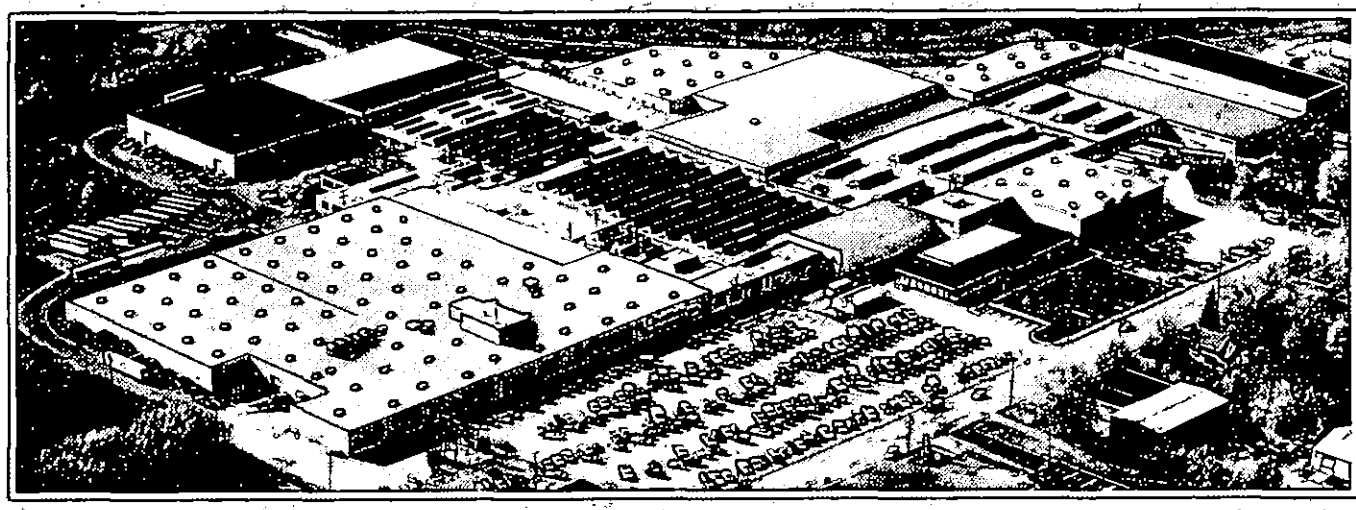

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