



PREFABRICATED SHEET METAL
DUCTS & FITTINGS

PRODUCT CATEGORY INDEX

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Call us toll-free at:

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 Nebraska • (800) 801-0336
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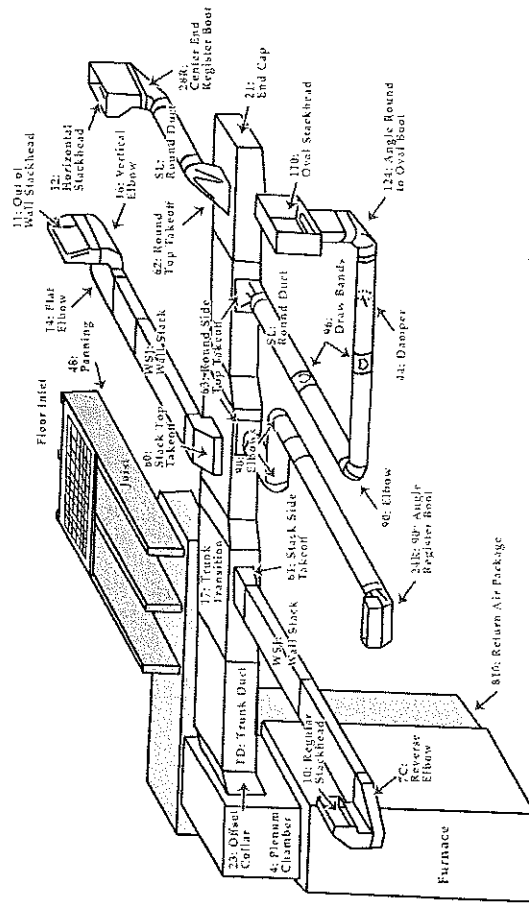
www.southwarkmetal.com

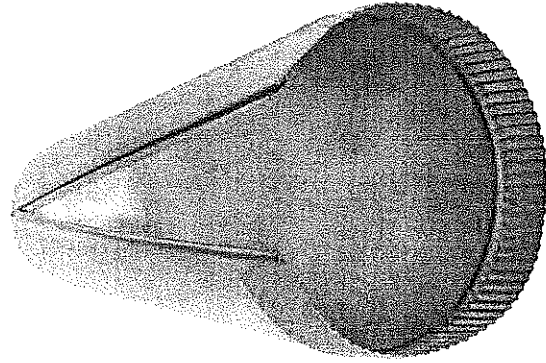
About Us

Southwark Metal Manufacturing Company is a third generation family owned company that has been manufacturing prefabricated sheet metal ducts and fittings for over 60 years.

With six manufacturing plants across the United States, we guarantee to exceed your highest expectations with our quality products and superior service.

For all products within this catalog, please check with your local customer service representative for fitting sizes, availability, pricing, and submittal information.





SNAPLOCK PIPE

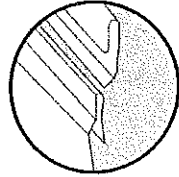
No tools required for assembly!

Simply start at one end and easily snap pipe together. One person can quickly assemble up to 10 ft. lengths.

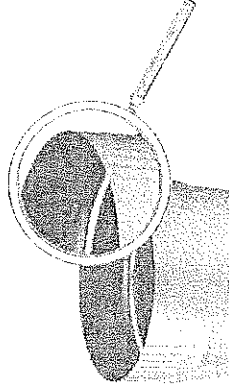
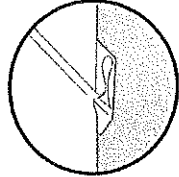
The male end's self-starting crimp is knurled sufficiently so that the crimp "falls in" and yet, once assembled, completes a rigid, leak-proof connection that meets $\pm 2''$ w.g. pressure.

- Available in 2ft, 3ft, 4ft, 5ft, and 10ft lengths
- Available in 30Ga, 28Ga, 26Ga, and 24Ga steel.

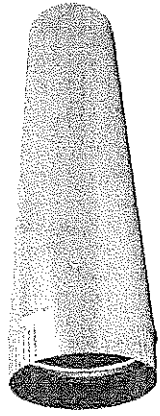
Open view



Closed view



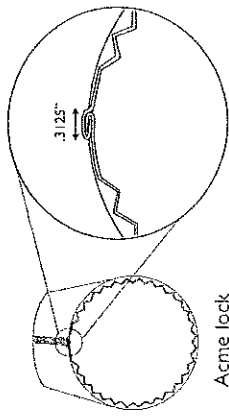
ROUND PIPE, ELBOWS, ANGLES, REGISTER BOOTS



MUI 20

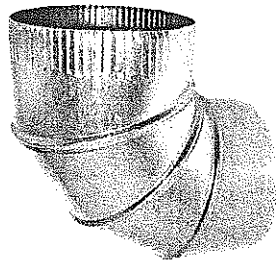
Conductor Pipe

- Available in 30Ga, 28Ga, and 26Ga
- 10 ft in length
- 3" and 4" diameters only
- Acme type lock, shipped closed



Acme lock

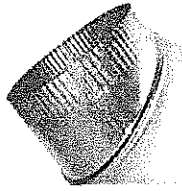
REGISTER BOOTS



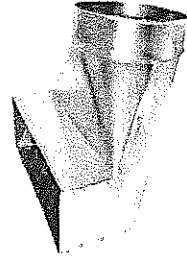
90° ADJUSTABLE ELBOW

Featuring:

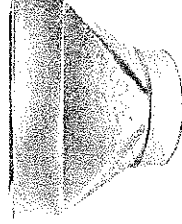
- 4 pc. assembly for diameters 3" - 20"
- 5 pc. assembly for diameters 22" - 24"
- Crimp and bead male connection and straight female connection
- Meets $\pm 2''$ w.g. pressure overall



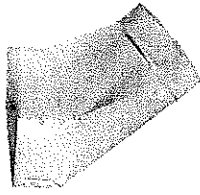
45° ADJUSTABLE ANGLE



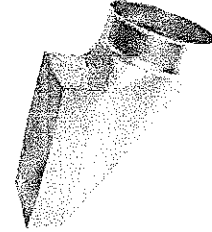
24R
90° Register Boot



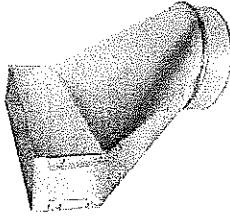
27R
Straight Register Boot



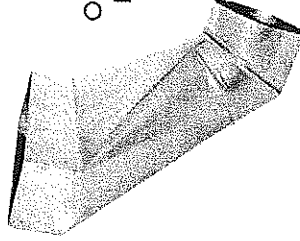
26R
45° Register Boot



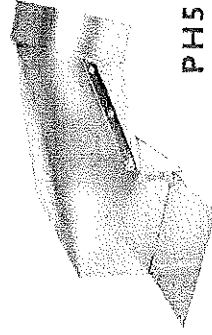
28R
Center End
Register Boot
No. 28RL Left
No. 28RR Right



29RO
2" Offset
Register Boot



17CR
Offset Adjustable
Register Boot



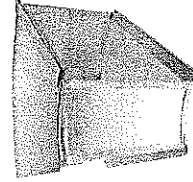
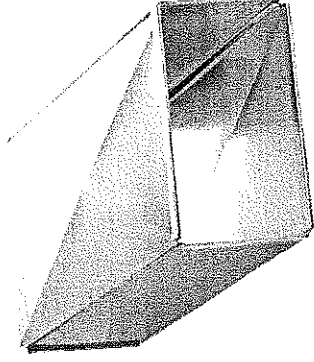
PH5
90° Basement Boot

TRUNK DUCT and FITTINGS

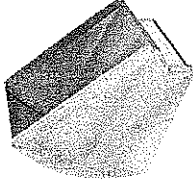
TRUNK DUCT

Featuring:

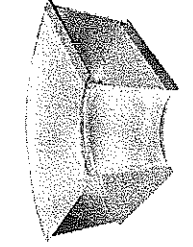
- Available in 12", 30", 36", 48", 60", and 96" lengths
- Furnished in button snap-lock with s-cleat and drive connections
- Cross broken for extra stiffening strength
- E-lock duct also available
- Beaded duct also available



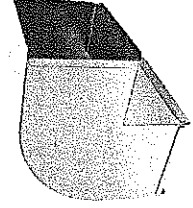
13
45° Vertical
(Shortway) Elbow
Radius Throat



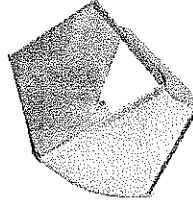
13S
45° Flat
(Broadway) Angle
Square Throat



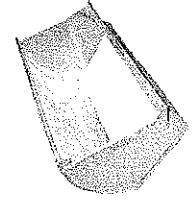
14
90° Flat
(Broadway) Elbow
Radius Throat



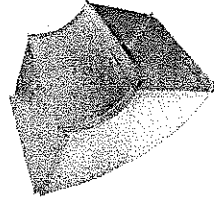
14S
90° Flat
(Broadway) Elbow
Square Throat



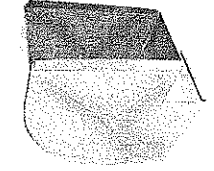
15
45° Vertical
(Shortway) Angle
Radius Throat



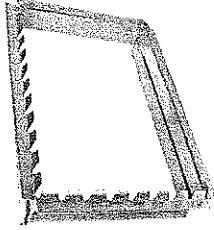
15S
45° Vertical
(Shortway) Angle
Square Throat



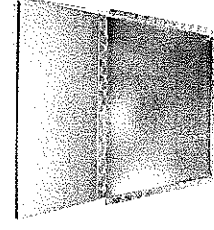
16
90° Vertical
(Shortway) Elbow
Radius Throat



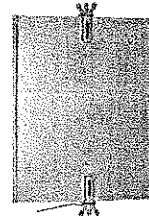
16S
90° Vertical
(Shortway) Elbow
Square Throat



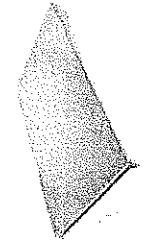
20
Straight Collar



23AT
Transition Collar



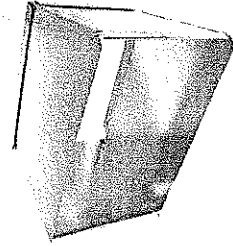
42
Volume Damper



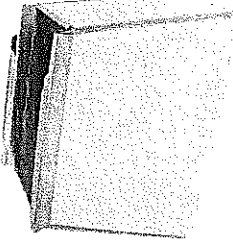
21
End Cap



23
Offset Collar



17
Trunk Transition
(tapered to one side)

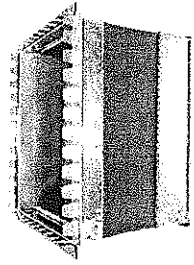


17C
Trunk Reducer
(tapered to center)

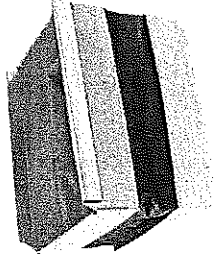
| Duct Size | Plenum Opening |
|-----------|----------------|
| 14 x 8 | 12 x 10 |
| 16 x 8 | 12 x 11 |
| 18 x 8 | 12 x 12 |
| 20 x 8 | 12 x 14 |
| 22 x 8 | 12 x 15 |
| 24 x 8 | 12 x 16 |
| 26 x 8 | 14 x 15 |
| 28 x 8 | 14 x 16 |
| 30 x 8 | 16 x 15 |
| 32 x 8 | 16 x 16 |

| Duct Size | Plenum Opening |
|-----------|----------------|
| 8 x 8 | 8 x 10 |
| 10 x 8 | 8 x 10 |
| 12 x 8 | 10 x 10 |
| 14 x 8 | 10 x 12 |
| 16 x 8 | 10 x 12 |
| 18 x 8 | 10 x 14 |
| 20 x 8 | 10 x 16 |
| 22 x 8 | 10 x 18 |
| 24 x 8 | 10 x 20 |
| 26 x 8 | 12 x 18 |
| 28 x 8 | 12 x 18 |
| 30 x 8 | 12 x 20 |
| 32 x 8 | 14 x 20 |

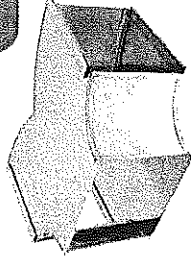
**TRUNK DUCT, FITTINGS, and
INSTALLATION ACCESSORIES**



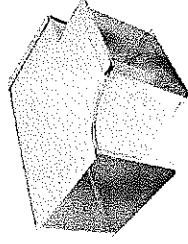
18
Connector
Plenum to Trunk



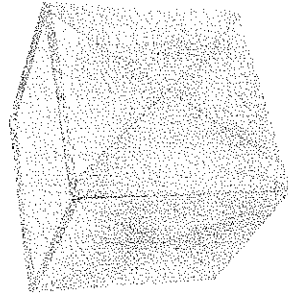
47
Connector
Furnace to Plenum



14TT
Trunk Tee



17TT
Trunk Tee



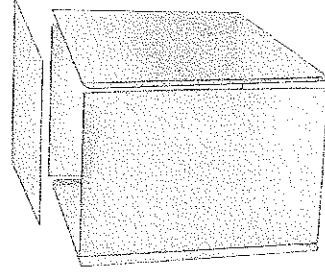
4
Plenum Chamber
• Custom Sizes
• Shipped knocked down
or made-up by request
• "B" style available with flange

ADJUSTABLE PLENUMS

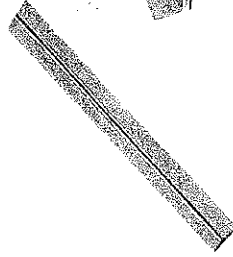
Please note: Actual plenum height is 2" less than listed size.

TO INSTALL:

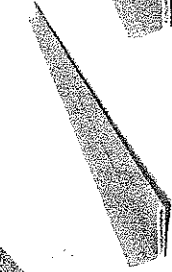
- 1) Cut raw edges of side panels to desired width and height.
- 2) Trim top to desired width and depth.
- 3) Assemble 3 sides, slide top into side panel pockets, then position fourth side.
- 4) To complete, secure assembly with sheet metal screws.



49T
Adjustable Plenum Top
49P
Adjustable Plenum Side
49C
Complete Adjustable Plenum



8D
Drive Cleat
8" and 10", available



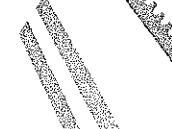
37
1/2" Leg
Rigid S-Cleat



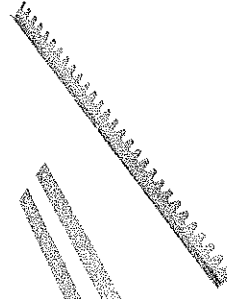
135
1" Leg
Rigid S-Cleat



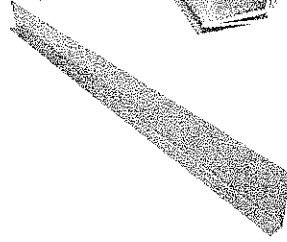
6S
S-Cleat
10" and 12" available



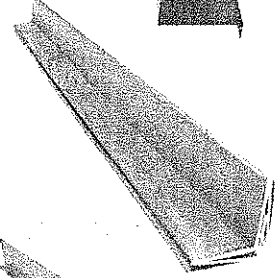
5
Duct Hanger



3
Fiberglass Extension



1106
Cold Air Frame



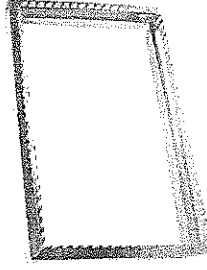
1112
Plenum Corner



133
Line Cover

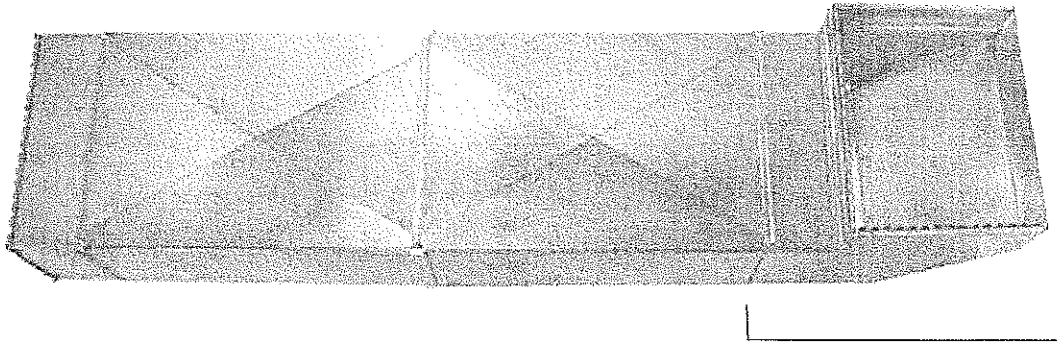


134
Can Stock



FR
Filter Rack

RETURN AIR PRODUCTS



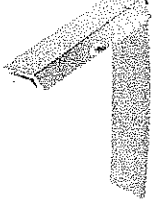
COLD AIR BOOT

| Part No. | A | B | C | Return Duct Size |
|----------|-----|-----|-----|------------------|
| SB30 | 30" | 20" | 10" | 8 x 24 |
| SB38 | 38" | 26" | 15" | 10 x 25 |
| SBF30 | 30" | 22" | 15" | 8 x 24 |
| SBF32 | 32" | 22" | 15" | 8 x 24 |
| SBF36 | 36" | 26" | 15" | 10 x 25 |
| SBF38 | 38" | 28" | 15" | 10 x 25 |

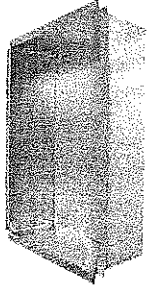
35
Trunk Reducer



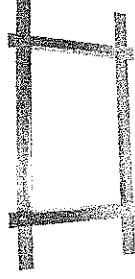
35A
Trunk Reducer



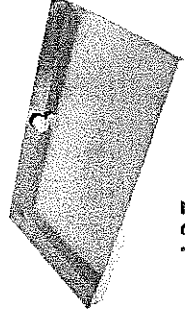
48
Panning Material



170
Return Air Pan



31
Return Air Frame



137
Drain Pan
3/4" Slip Fitting

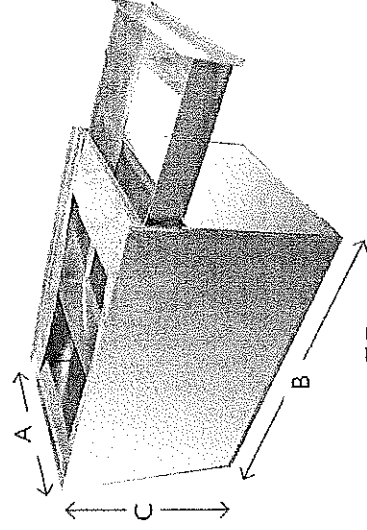
RETURN AIR PACKAGE

Complete package consisting of:

- 1 - #20 Starting collar
- 2 - 30" duct sections
- 1 - return air plenum with 1" filter rack
- 6 - 10" drive straps

Shipped knocked down in one carton

| Return Air Pkg | Duct Size Range | Boot Only |
|----------------|-----------------|-----------|
| 810 | 20x10 - 20x16 | 810B |
| 811 | 25x10 - 25x16 | 811B |
| 812 | 20x10 - 20x14 | 812B |
| 813 | 25x10 - 25x14 | 813B |
| 814 | 20x8 - 20x16 | 814B |
| 815 | 24x8 - 24x16 | 815B |
| 816 | 20x8 - 20x14 | 816B |
| 817 | 24x8 - 24x14 | 817B |

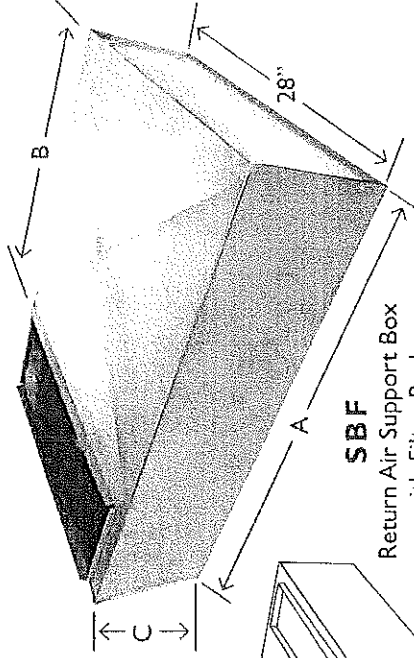
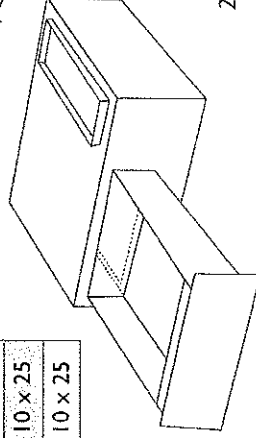


FB

Furnace Box with Filter Drawer
Also available with Hinged Door

| Part No. | A | B | C | Filter Size |
|----------|---------|---------|---------|-------------|
| FB1428 | 14 1/4" | 28 1/2" | 18 1/2" | 14x25 |
| FB1728 | 17 1/4" | 28 1/2" | 18 1/2" | 16x25 |
| FB2128 | 21 1/4" | 28 1/2" | 18 1/2" | 20x25 |
| FB2428 | 24 1/4" | 28 1/2" | 18 1/2" | 20x25 |

SB
Return Air Support Box



SBF

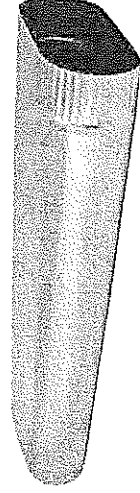
Return Air Support Box
with Filter Rack

22 x 28 drawer accommodates
1", 4" and 5" 20x25 filters

OVAL PIPE and FITTINGS

OVAL PIPE

| Pipe Size | Height | Circumference | Area | CFM Capacity at 10 I/W/C |
|-----------|---------|---------------|------------|--------------------------|
| 5" | 2 1/2" | 15.7" | 17.2 sq in | 60 CFM |
| 6" | 2 7/8" | 18.8" | 22.2 sq in | 78 CFM |
| 7" | 3" | 22.0" | 27.3 sq in | 104 CFM |
| 8" | 3 1/16" | 25.1" | 32.2 sq in | 190 CFM |

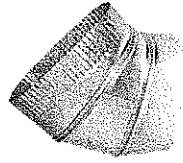


WALL STACK VS. OVAL PHYSICAL COMPARISON

| | | | |
|--------------------------------|---------------------------------|---------------------------------|---------------------------------|
| <p>5" OVAL 3 1/2" X 8"</p> | <p>6" OVAL 3 1/2" X 10"</p> | <p>7" OVAL 3 1/2" X 12"</p> | <p>8" OVAL 3 1/2" X 14"</p> |
|--------------------------------|---------------------------------|---------------------------------|---------------------------------|

All oval pipe is made from 30Ga galvanized steel.

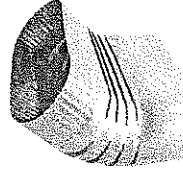
- No. 160 60" Oval Pipe Joint
- No. 100 100" Oval Pipe Joint
- No. 112 112" Oval Pipe Joint
- No. 113 113" Oval Pipe Joint
- No. 114 114" Oval Pipe Joint



113
45° Flat
(Broadway)
Oval Angle



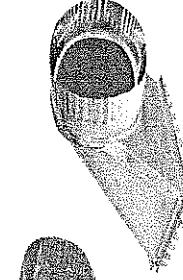
114
90° Flat
(Broadway)
Oval Elbow



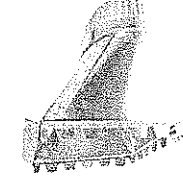
115
45° Vertical
(Shortway)
Oval Angle



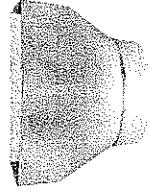
116
90° Vertical
(Shortway)
Oval Elbow



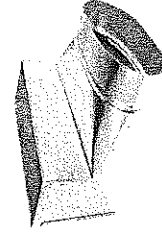
162
Top Oval
Takeoff



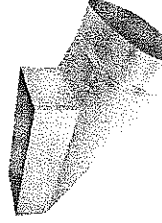
163
Side Oval
Takeoff



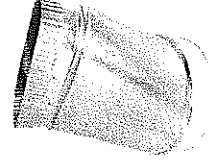
127R
Straight Oval
Register Boot



124R
90° Oval
Register Boot



128R
End Oval
Register Boot



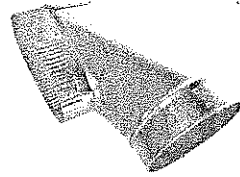
127
Oval to Round
Straight Boot



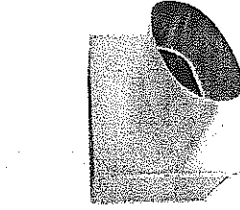
124
Oval to Round
90° Boot



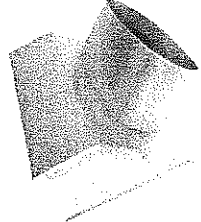
128
Oval to Oval
Reverse Boot



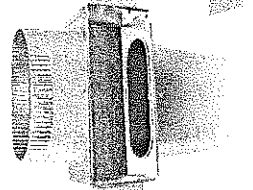
106
Oval to Round
Reverse Boot



355
Straight Oval
Register Box



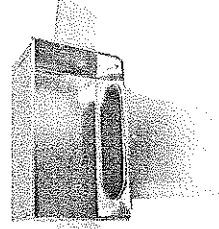
360
Angle Oval
Register Box



150
Oval Stackhead
with Collar



111
Register
Outlet



110
Oval
Stackhead

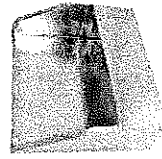
WALL STACK and FITTINGS

WALL STACK

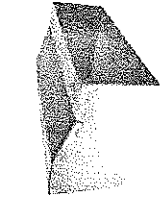
Featuring:

- 12", 24", 30", 60", 96", 100" and 113" lengths available
- Two pieces per section
- Furnished in button snaplock
- No tools and no indentations, just snap it and it's closed!

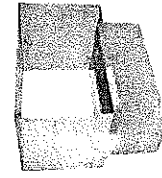
STACKHEADS



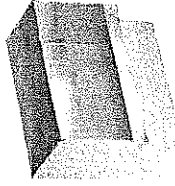
WS11
Projection
Stackhead



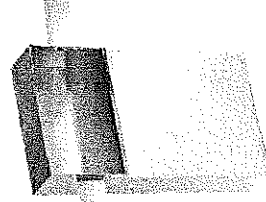
WS12
Horizontal
Stackhead



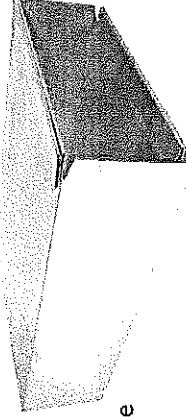
WS9
Double
Stackhead



WS10
Stackhead



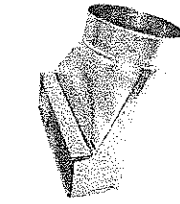
WS10X
Long Throat
Stackhead with Ears



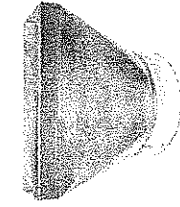
I32
Adjustable
"A" Adapter
Available in
2 1/4 x 10,
2 1/4 x 12, or
2 1/4 x 14



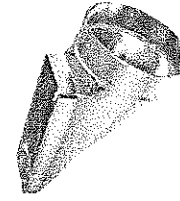
I33
Adjustable
"B" Adapter
Available in
4x10 - 3 1/4x10,
4x10 - 3 1/4x12, or
4x10 - 3 1/4x14



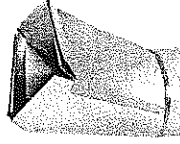
24
90° Stack Boot



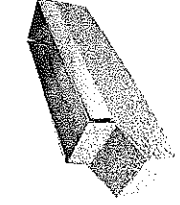
27
Straight
Stack Boot



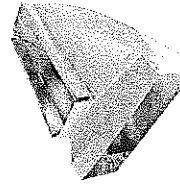
28
End Stack Boot



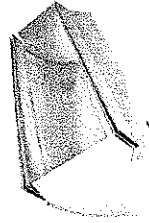
26
45° Stack Boot



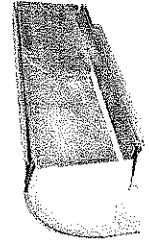
WS17
45° Stack Transition



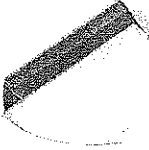
WS7C
Reverse Stack
Elbow (Center)



WS15
45° Vertical
(Shortway)
Stack Angle



WS16
90° Vertical
(Shortway)
Stack Elbow



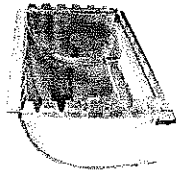
WS13
45° Flat
(Broadway)
Stack Angle



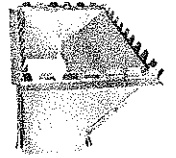
WS14
90° Flat
(Broadway)
Stack Elbow



WS20
Straight Stack
Collar



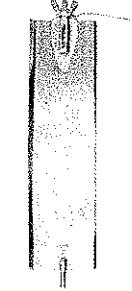
WS60
Top Stack
Takeoff



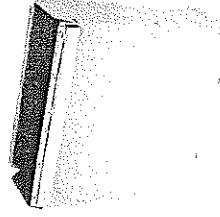
WS61
Side Stack
Takeoff



WS21
Stack
End Cap



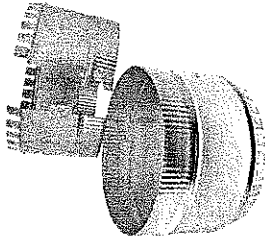
WS45
Stack Damper



PHEXT
PH Extension
10" long

SHEET METAL COLLARS

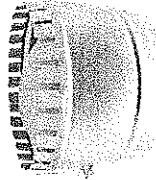
SHEET METAL and DUCTBOARD COLLARS



120SC
Snap Collar



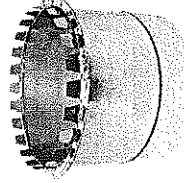
97
Collar
97NC
No Crimp



97LS
Long Collar
97LSWD
with Damper

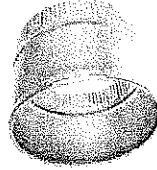


1051
Collar
1050
No Crimp

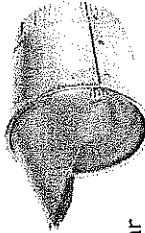


1150
Long Collar
1149
With Damper

SHEET METAL SPIN COLLARS



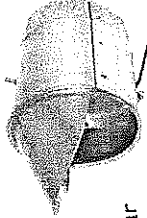
156
Spin Collar



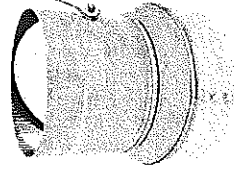
156S
Spin Collar
with Scoop



156D
Spin Collar
with Damper



156SD
Spin Collar
with Scoop
and Damper



156BM
Bellmouth
Spin Collar



156DBM
with Damper



156SDBM
with Scoop and
Damper

DUCTBOARD SPIN COLLARS



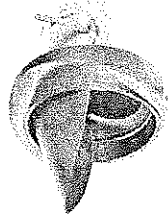
97FG
Spin Collar



98
Spin Collar
with Scoop

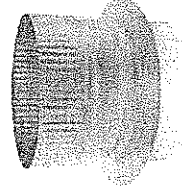


97FGWD
Spin Collar
with Damper

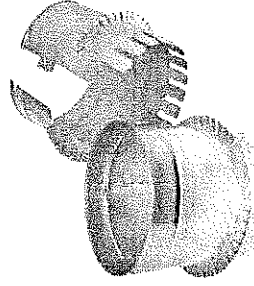


98WD
Spin Collar
with Scoop
and Damper

DUCTBOARD COLLARS



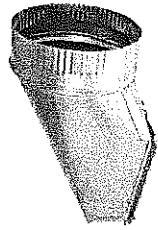
84ST
Ductboard Collar
84STWD
with Damper



122SC
Snap Collar
1 1/2" or 2"
Ductboard

121SC
Snap Collar
1" or 1 1/2" Ductboard

**SHEET METAL and
DUCTBOARD TAKEOFFS**



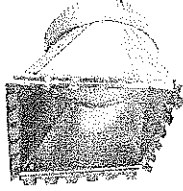
62
Top Takeoff
(Metal)

| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 4 x 6 |
| 5" | 5 x 6 |
| 6" | 6 x 6 |
| 7" | 7 x 7 |
| 8" | 8 x 8 |
| 9" | 10 x 10 |
| 10" | 10 x 10 |
| 12" | 12 x 12 |
| 14" | 14 x 14 |



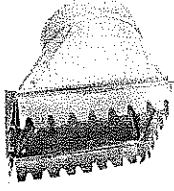
62FG
Top Takeoff
(Ductboard)

| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 4 x 6 |
| 5" | 5 x 6 |
| 6" | 6 x 6 |
| 7" | 7 x 7 |
| 8" | 8 x 8 |
| 9" | 10 x 10 |
| 10" | 11 1/2 x 10 |
| 12" | 12 x 12 |
| 14" | 14 x 14 |



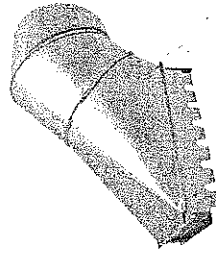
63
Side Takeoff
(Metal)

| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 6 x 6 |
| 5" | 6 x 6 |
| 6" | 6 x 6 |
| 7" | 6 x 8 |
| 8" | 6 x 10 |
| 9" | 7 x 12 |
| 10" | 7 x 14 |
| 12" | 8 x 18 |
| 14" | 8 x 20 |
| 16" | 10 x 21 |



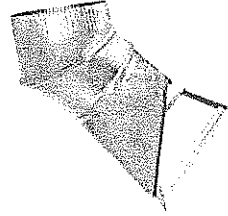
63FG
Side Takeoff
(Ductboard)

| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 6 x 6 |
| 5" | 6 x 6 |
| 6" | 6 x 6 |
| 7" | 6 x 8 |
| 8" | 6 x 10 |
| 9" | 7 x 12 |
| 10" | 7 x 14 |
| 12" | 8 x 18 |
| 14" | 8 x 20 |



2016
Adjustable Takeoff
(Ductboard)

| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 4 x 6 |
| 5" | 5 x 6 |
| 6" | 6 x 7 |
| 7" | 7 x 8 |
| 8" | 7 x 10 |
| 9" | 9 x 11 |
| 10" | 10 x 12 |
| 12" | 12 x 16 |
| 14" | 14 x 19 |



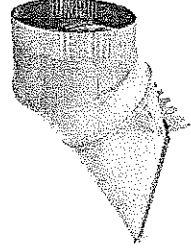
34PLF
Adjustable Takeoff
(Ductboard)

| Pipe Size | Base Opening |
|-----------|---------------|
| 5" | 5 x 6 |
| 6" | 6 3/8 x 6 3/8 |
| 7" | 7 x 8 |
| 8" | 6 3/8 x 10 |



63A
Adjustable Takeoff
(Metal)

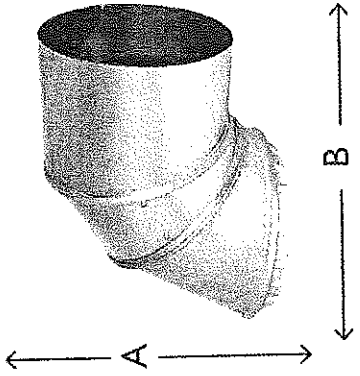
| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 4 x 6 |
| 5" | 5 x 6 |
| 6" | 6 x 7 |
| 7" | 7 x 8 |
| 8" | 7 x 10 |
| 9" | 9 x 11 |
| 10" | 10 x 12 |
| 12" | 12 x 16 |
| 14" | 14 x 19 |
| 16" | 14 x 18 |
| 18" | 18 x 18 |



63AFG
Adjustable Takeoff
(Ductboard)

| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 4 x 6 |
| 5" | 5 x 6 |
| 6" | 6 x 7 |
| 7" | 7 x 8 |
| 8" | 7 x 10 |
| 9" | 9 x 11 |
| 10" | 10 x 12 |
| 12" | 12 x 16 |
| 14" | 14 x 19 |

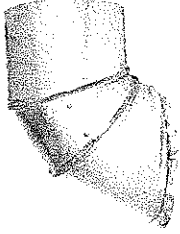
**SHEET METAL and
DUCTBOARD TAKEOFFS**



EP15
Full Tab Takeoff (Metal)

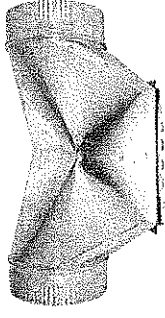
| Pipe Size | Base Opening | A | B |
|-----------|--------------|--------|---------|
| 4" | 6 3/8" | 7 1/4" | 9 1/4" |
| 5" | 6 3/8" | 7 1/4" | 9 1/4" |
| 6" | 7" | 7 1/2" | 11" |
| 7" | 8" | 8 1/2" | 12 1/2" |

Features 3/4" tabs, tapered collar, and no crimp.
1 7/8" rise when installed.



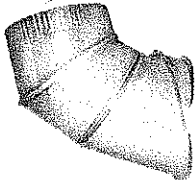
HT15
Half-Tab Takeoff
(Metal)

| Pipe Size | Base Opening |
|-----------|--------------|
| 4" | 6 3/8" |
| 5" | 6 3/8" |
| 6" | 7" |
| 7" | 8" |



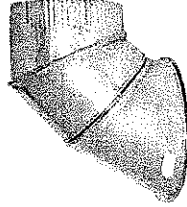
64
Double Top Takeoff
(Metal)

| Pipe Size | Base Opening |
|-----------|--------------|
| 5" | 6 x 10 |
| 6" | 7 x 10 |
| 7" | 7 x 14 |
| 8" | 8 x 14 |



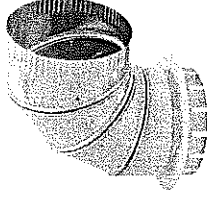
S5
Pivot Takeoff
(Metal)

| Pipe Size | Base Opening |
|-----------|--------------|
| 5" | 6" |
| 6" | 7" |
| 7" | 8" |



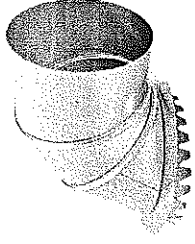
87
Lever Lock Takeoff
(Metal)

| Pipe Size | Base Opening |
|-----------|--------------|
| 5" | 6" |
| 6" | 7" |
| 7" | 8" |



2015
Round Takeoff
Elbow (Ductboard)

| Pipe Size | Base Opening |
|-----------|--------------|
| 5" | 6" |
| 6" | 7" |
| 7" | 8" |
| 8" | 9" |

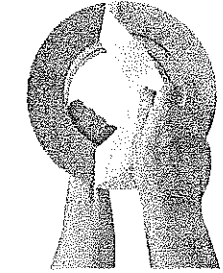


2022
Round Takeoff
(Ductboard)

| Pipe Size | Base Opening |
|-----------|--------------|
| 5" | 6" |
| 6" | 7" |
| 7" | 8" |
| 8" | 9" |

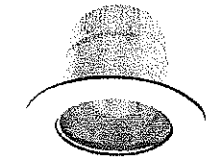
AIR-TITE TAKEOFFS

AIR-TITE TAKEOFFS



Featuring:

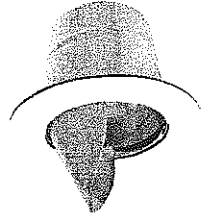
- 1/2" wide and 1/8" thick gasket, made with high tack adhesive-coated neoprene foam -- just peel and stick for easy installation
- Gasket includes 4 1/8" pre-drilled holes for sheet metal screws attachment
- RL-2 rivet seam (+/- 4" w.g.) with 1/2" overlap, using 1/8" rivets
- Dampers available for 1/4" and 3/8" square and round bearings; also available 3/8" continuous rod damper (by request)
- Damper fittings available with 1/2" or 2" standoffs (by request)



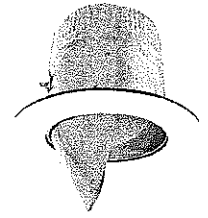
ATT
Airtite Takeoff



ATD
Airtite Takeoff
with Damper



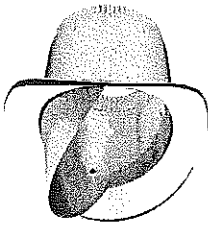
ATS
Airtite Takeoff
with Scoop



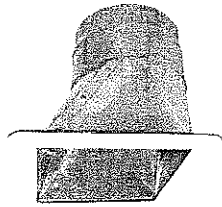
ATSD
Airtite Takeoff
with Scoop
and Damper



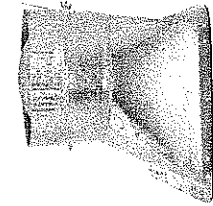
ATRRP
Round Pipe
Takeoff
ATDRP
with Damper



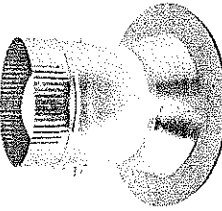
ATSRP
Round Pipe Takeoff
with Scoop
ATSDRP
with Scoop
and Damper



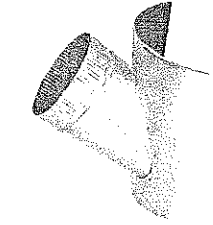
AT63
Rectangular
Airtite Takeoff
AT63WD
with Damper



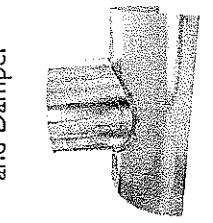
ATHE
High Efficiency
Airtite Takeoff
ATHEWD
with Damper



ATTBM
Bellmouth
Airtite Takeoff
ATDBM
with Damper



ATTRP90
90° Saddle
Airtite Takeoff



AT62
Airtite Top Takeoff
AT62WD
with Damper

| Pipe Size | Base-Opening |
|-----------|--------------|
| 4" | 6 x 6 |
| 5" | 6 x 6 |
| 6" | 6 x 6 |
| 7" | 6 x 8 |
| 8" | 6 x 10 |
| 9" | 7 x 12 |
| 10" | 7 x 14 |
| 12" | 8 x 18 |
| 14" | 8 x 20 |

| Pipe Size | Base-Opening |
|-----------|--------------|
| 4" | 5 x 10 |
| 5" | 5 x 10 |
| 6" | 6 x 12 |
| 7" | 6 x 12 |
| 8" | 6 x 12 |
| 9" | 6 x 15 |
| 10" | 6 3/4 x 16 |
| 12" | 8 1/2 x 18 |
| 14" | 9 1/2 x 20 |
| 16" | 14 x 22 |

| Collar Size | Bellmouth Size |
|-------------|----------------|
| 6" | 8" |
| 7" | 9" |
| 8" | 10" |
| 10" | 12" |
| 12" | 14" |
| 14" | 16" |
| 16" | 18" |

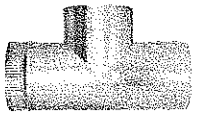


AT62
Airtite Top Takeoff
AT62WD
with Damper



AT63A
Adjustable
Airtite Takeoff

**TEES, WYES, REDUCERS
and ACCESSORIES**



TEE

No. 53 24" Long
No. 54 15" Long
Available in
26Ga or 24Ga



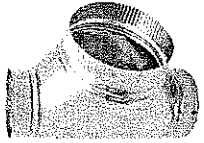
1060

Free Flow Tee
Available in 30Ga,
26Ga, and 24Ga



200

Trunk Tee



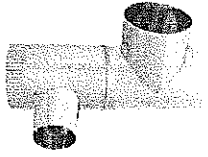
201

Straight-Thru Tee



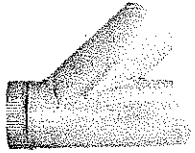
202

Reducing Tee



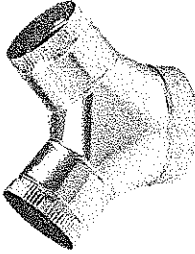
54SW

Swivel Tee



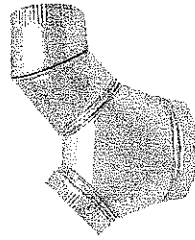
SMOKE WYE

No. 50 15" Long
No. 51 24" Long



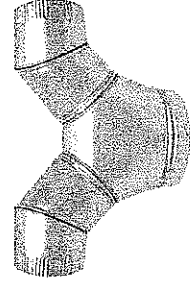
78

Wye Branch



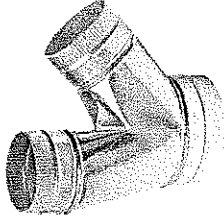
78-1

One-Way
Adjustable Wye



78-2

Two-Way
Adjustable Wye



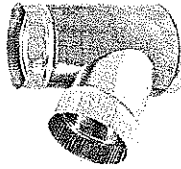
715

Splitter Wye



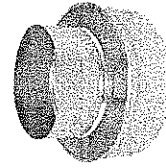
52

Flue Wye



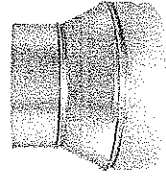
203S

Stub Wye



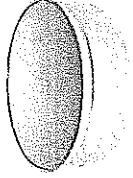
582

2 pc Reducer



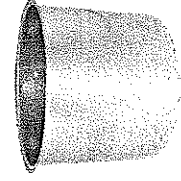
58

3 pc Reducer
Available Crimped



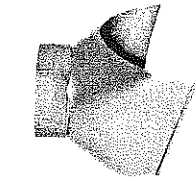
55

End Cap
Available Crimped,
With/Without Handle



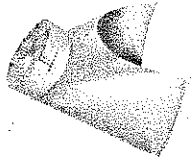
117

Flue Thimble



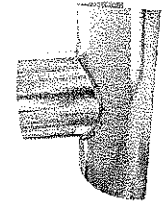
207QT

90° Saddle Tee



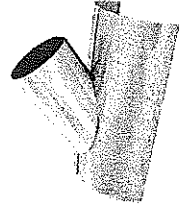
208QY

45° Saddle Wye



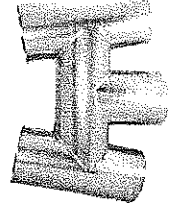
207

90° Vent Saddle



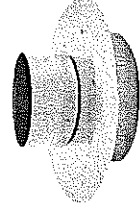
208

45° Vent Saddle



199

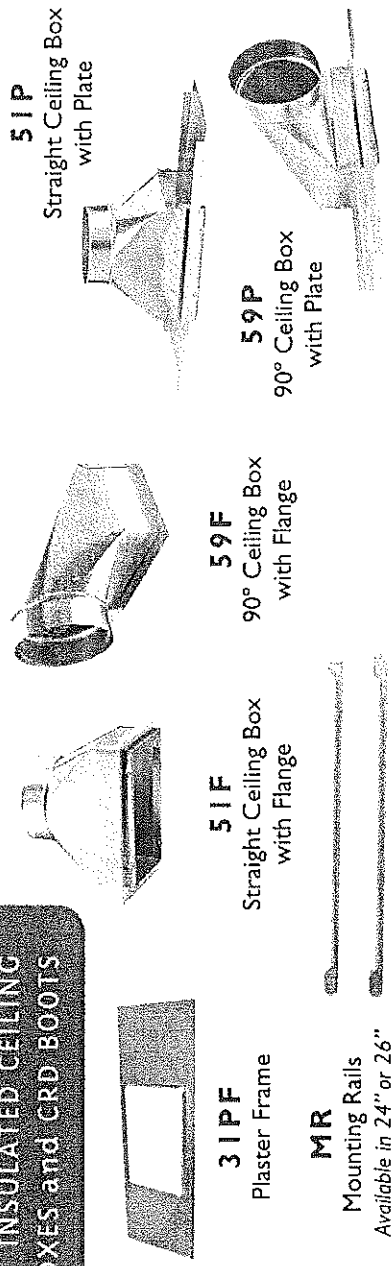
H-Vent



64FR

Flue Reducer

INSULATED CEILING BOXES and CRD BOOTS



51P
Straight Ceiling Box
with Plate

51F
Straight Ceiling Box
with Flange

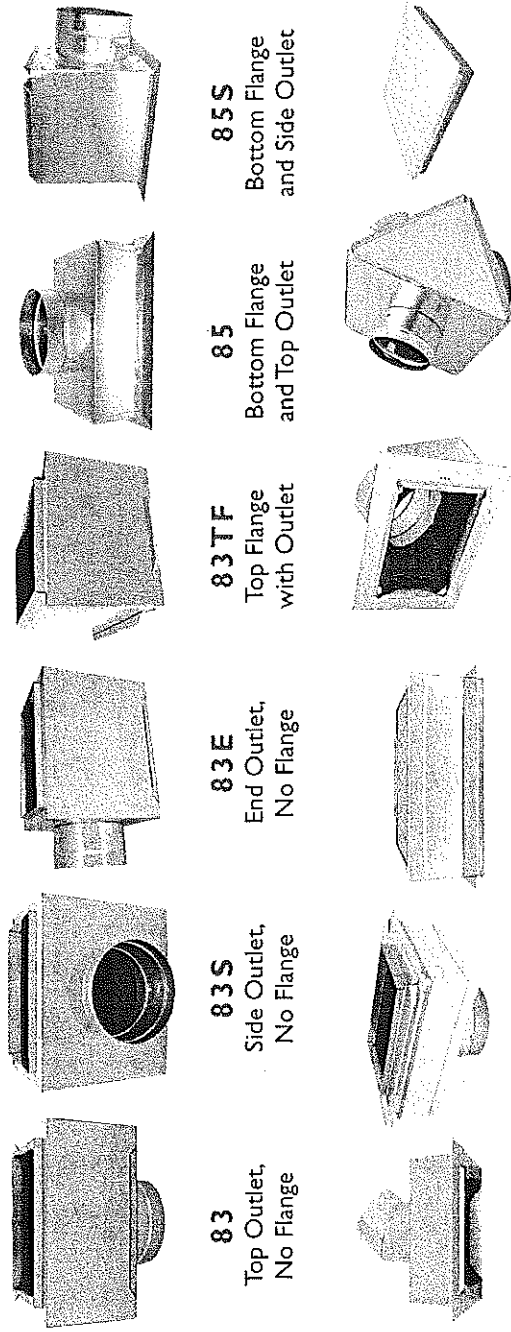
59F
90° Ceiling Box
with Flange

59P
90° Ceiling Box
with Plate

MR
Mounting Rails
Available in 24" or 26"

INSULATED CEILING BOXES

Liner is available in R4 (1"), R6 (1½"), or R8 (2") insulation.



83
Top Outlet,
No Flange

83S
Side Outlet,
No Flange

83E
End Outlet,
No Flange

83TF
Top Flange
with Outlet

85
Bottom Flange
and Top Outlet

85S
Bottom Flange
and Side Outlet

85A
Bottom Flange,
Angle Attached

85DB
Bottom Flange
with Outlet
(Ductboard)

84DB
Bottom Flange
No Outlet
(Ductboard)

86
Slant Top
with Flange

577
Insulated Wye

577P
Insulated Wye
Panels

CEILING RADIATION DAMPER BOOTS

Boots are non-insulated. Features rectangular radiation damper, butterfly-type, UL Classified 555C (3-hr rating), 212° easy access fusible link. Damper is attached with matching rivets and mounting brackets on all four sides; position in throat varies fitting to fitting.



51CRD
Straight
CRD Boot

51FCRD
Straight
CRD Boot
with Flange

59CRD
90° CRD Boot

59FCRD
90° CRD Boot
with Flange

58CRD
Center End
CRD Boot

58FCRD
Center End
CRD Boot
with Flange

**REGISTER BOXES
and CEILING OUTLETS**



19RC
Register Collar



70
Register Takeoff



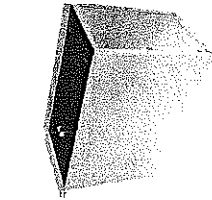
71
Register Tee



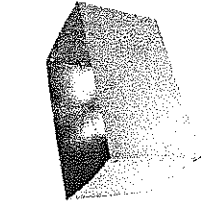
74
Register Cap



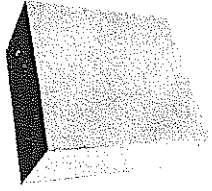
81
Ceiling Outlet
81D
with Damper



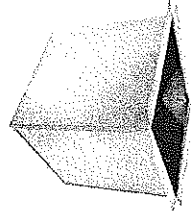
75
Register Box
7" Deep



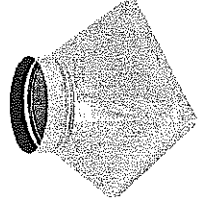
90
Floor Register Box
5" or 6" Deep



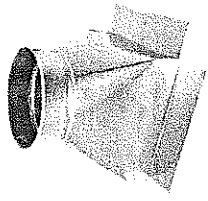
91
Floor Register Box
10" or 11" Deep



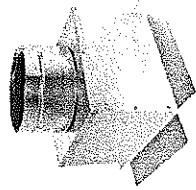
73
Square
Diffuser Box



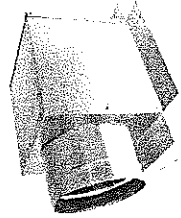
73C
Square to Round
Transition Outlet



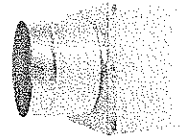
77
Square to Round
Diffuser Box



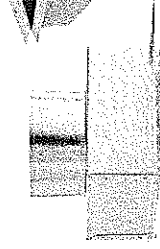
177
Ceiling Outlet



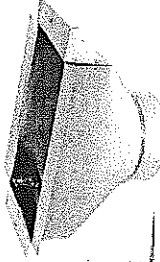
177S
Side Outlet



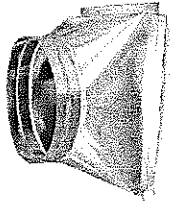
277
Square to Round
Diffuser Outlet,



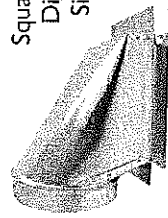
277F
Square to Round
Diffuser Outlet,
with Flange



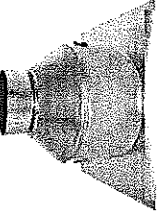
92
Funnel Register
Box with Flange



92B
Funnel Register Box
B-Box Style



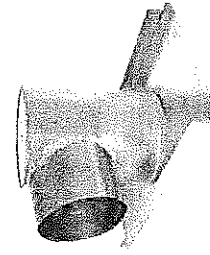
77S
Square to Round
Diffuser Box,
Side Outlet



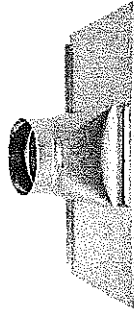
58WF
Diffuser Outlet
with Flange



72
Diffuser Tee

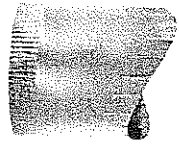


72WF
Diffuser Tee
with Flange

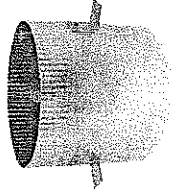


77WF
Diffuser Funnel with Flange

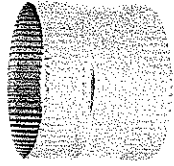
FURNACE FITTINGS and ACCESSORIES



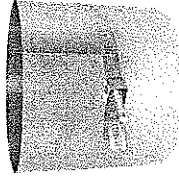
83PC
Branch
Connector



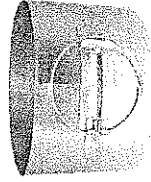
86SC
Sleeve
Connector



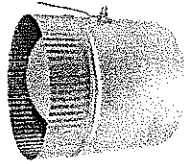
97FC
Flex
Connector



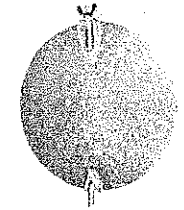
96
Drawband



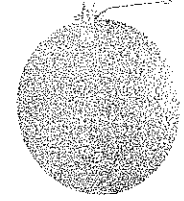
S75
Snap
Drawband



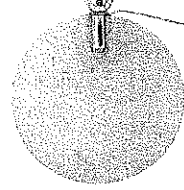
40
Damper
Section



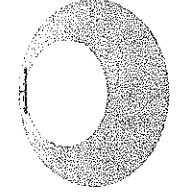
44
Two Quad
Damper



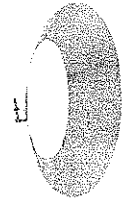
44S
Damper
Fixed Hardware



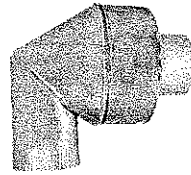
44-1
One Quad
Damper



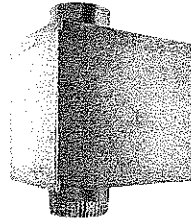
63FC
Ceiling Collar



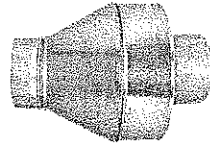
142
Storm Collar



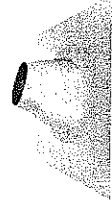
93
Elbow
Draft Vent



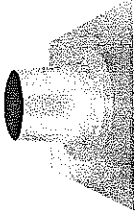
94
Horizontal
Draft Vent



95
Vertical
Draft Vent



140
Adjustable
Roof Flashing



141
Tall Cone
Flashing



RJ
Roof Jack

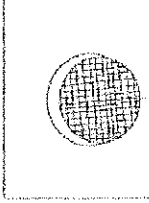
WALL CAP



36
Wall Cap



39
Wall Cap
with Damper

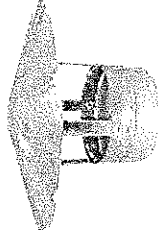


36AL
Aluminum Wall Cap

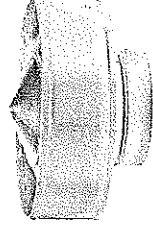
39AL
Aluminum Wall Cap
with Damper

Available with
and without 1/4"
galvanized wire
birdscreen mesh
covering interior
tube opening.

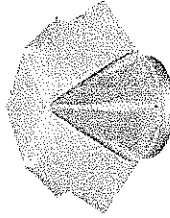
Mesh covering opening



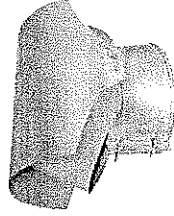
99
Chimney Cap



99A
Chimney Cap

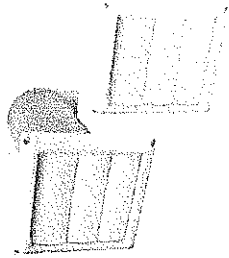


99VC
Vent Cap

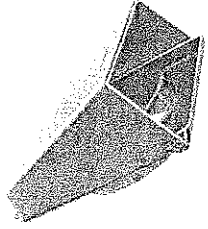


99LD
Lo-Draft Chimney Cap

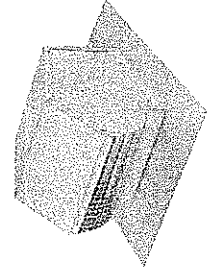
**VENTING PRODUCTS
AND MOBILE HOME KITS**



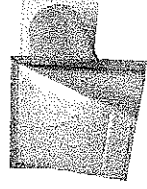
390WP
White Louver
Hood with Tail
Face Only



39GP
Gray Plastic Wall
Cap with Damper



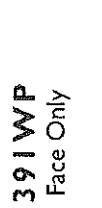
ROOF CAP
Aluminum with
Damper and Screen
No. 239 Fits 4" round
No. 240 Up to 7" round
No. 241 Up to 10" round



SVH
Aluminum
Vent Hood



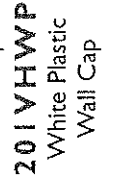
201VH
Aluminum
Wall Cap



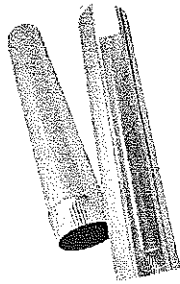
391WP
White Plastic
Face Only



SVHBP
Brown Plastic
Vent Hood



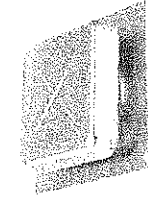
201VHWP
White Plastic
Wall Cap



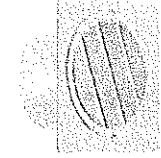
SAP
Aluminum
Snaplock Pipe



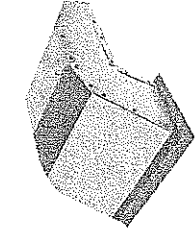
SAE
Aluminum
90° Elbow



RV51
Aluminum Roof
Cap with Screen
Up to 8" Round



EVI41
Eave Vent



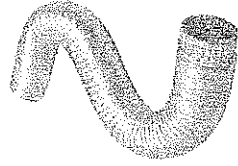
220EC
Eave Vent
with Grille



SPC
Pipe Clamp



SH
Flexible White
Vinyl Hose



MF
Flexible
Aluminum
Duct



SAL
Aluminum
Transition
Duct

MOBILE HOME KITS

SWK

Single Wide Kit

Includes:

- 1 - Return Air Box
- 1 - Butterfly Damper
- 1 - Floor Grille
- 1 - Panel Filter



Panel Filter

DWK

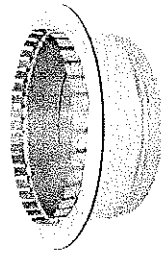
Double Wide Kit

Includes:

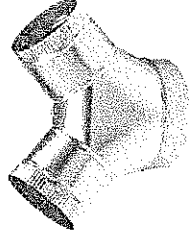
- 1 - Return Air Box
- 2 - Butterfly Dampers
- 1 - 78 Wye Branch
- 1 - Floor Grille
- 1 - Panel Filter



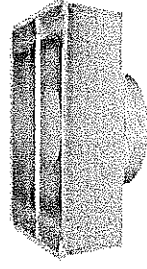
Floor Grille



Butterfly Damper



78
Wye Branch



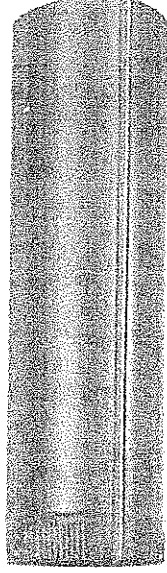
74
Return Air Box
Available as
6" Deep Box or
12" Deep Box

Kit sizes available:
12x20-12 Round, 12x20-14 Oval,
and 14x20-14 Round.

BLACK PIPE and FITTINGS

BLACK PIPE & FITTINGS:

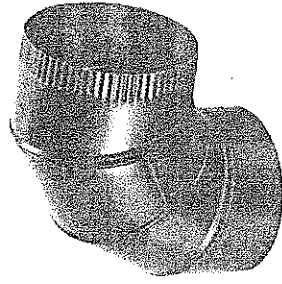
- Available in 5", 6", 7", and 8" diameters
- 24 Gauge material, cold-rolled steel coils per ASTM A1008 CS-B (aiming 1/2 standard ASTM tolerances), skinpassed
- High heat black-painted with Valspar WPA0053 (.35 mil each side)
- Heat and rust resistant
- Standard packaging



BP

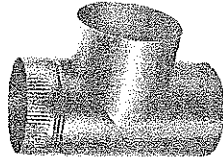
Snaplock Pipe

Available in 12", 24", and 36" lengths



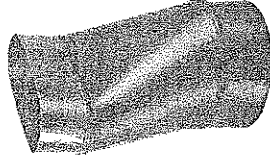
BP90

90° Adjustable Elbow



BP54

Tee



BP127

Oval to Round Adapter



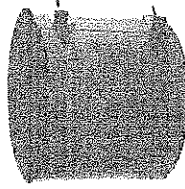
BPCHAD

Chimney Adapter



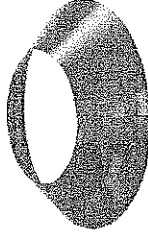
BP55

End Cap



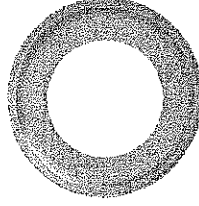
BP96

Drawband



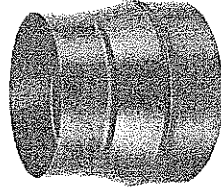
BPTC

Trim Collar



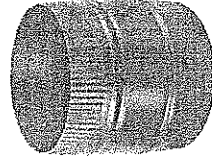
BPC

Pipe Collar



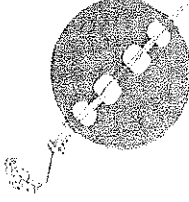
BP58

3 pc Reducer



BPCON

Connector



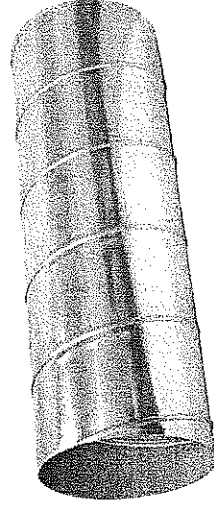
CID

Cast Iron Damper

SPIRAL PIPE and FITTINGS

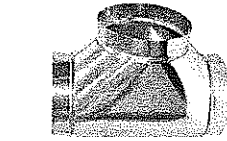
SPIRAL PIPE & FITTINGS:

- 26 Ga and 24 Ga galvanized steel
- Also available in galvanized steel by request
- Low pressure fittings (+/- 4" w.g. pressure rating)
- Riveted connection
- Outside dimensions of each end diameter is approximately 1/8" under nominal size



SP10
Spiral Pipe

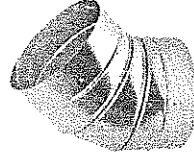
- Featuring:*
- 10 ft lengths
 - Available in 4" - 24" diameters
 - RL-1 spiral lock seam
 - Available in 26Ga and 24Ga



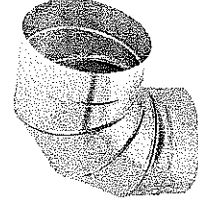
SP54
Tee Joint



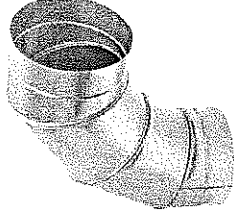
SP55
End Cap



SP45
45° Angle



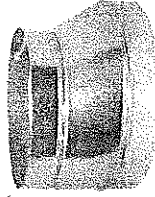
SP90
90° Adjustable
Elbow



SP90LR
Long Radius
90° Elbow



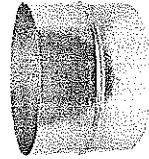
SP58
Tapered Reducer



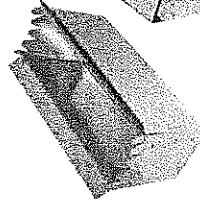
SP58ER
Eccentric Reducer



SP6
90° Shoe Tap



SPCON
Connector



SP70
Register Saddle

| Diameter | Bend Radius |
|----------|-------------|
| 4" | 3" |
| 5" | 3 3/4" |
| 6" | 4 1/2" |
| 7" | 5 1/4" |
| 8" | 6" |
| 10" | 7 1/2" |
| 12" | 9" |
| 14" | 10 1/2" |
| 16" | 12" |
| 18" | 13 1/2" |
| 20" | 15" |
| 22" | 16 1/2" |
| 24" | 18" |

| Diameter | Bend Radius |
|----------|-------------|
| 4" | 6" |
| 5" | 7 1/2" |
| 6" | 9" |
| 7" | 10 1/2" |
| 8" | 12" |
| 10" | 15" |
| 12" | 18" |
| 14" | 21" |
| 16" | 24" |
| 18" | 27" |
| 20" | 30" |
| 22" | 33" |
| 24" | 36" |

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| 5 | Duct Hanger | 4 | 49T | Adjustable Plenum Top | 4 |
| 6S | S-Cleat | 4 | 50 | Wye - 15" Long | 12 |
| 8D | Drive Cleat | 4 | 51 | Wye - 24" Long | 12 |
| 13 | Flat Trunk 45° Angle | 3 | 51CRD | Straight CRD Boot | 13 |
| 14 | Flat Trunk 90° Elbow | 3 | 51F | Straight Ceiling Box | 13 |
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| 17 | Trunk Transition | 3 | 53 | Tee - 24" Long | 12 |
| 17C | Trunk Transition (center) | 3 | 54 | Tee - 15" Long | 12 |
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| 18 | Connector- Plenum to Trunk | 4 | 58 | 3-pc Reducer | 12 |
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| | | | 97LS | Long Collar | 8 |
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| | | | 99VC | Vent Cap | 15 |
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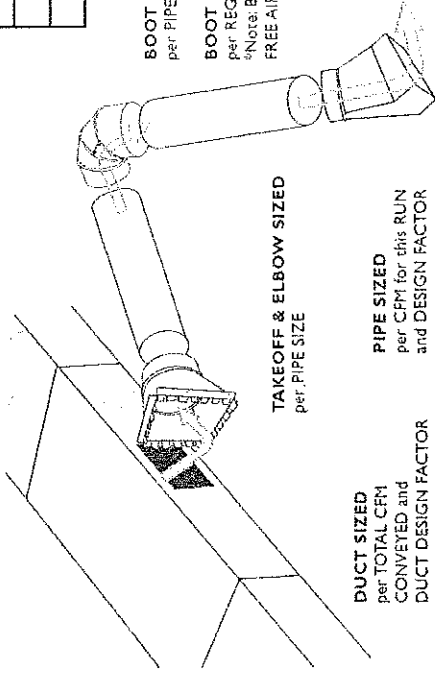
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| 134 | Can Stock | 7 | 1109 | Transition Collar | 3 |
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| 360 | Oval Angle Register Box | 6 | EPI5 | Full Tab Takeoff (Metal) | 10 |
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| 391WVP | White Louver Hood | 16 | FB | Furnace Box | 5 |
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| 577P | Insulated Wye Panel | 13 | HT15 | Half Tab Takeoff (Metal) | 10 |
| 582 | 2-pc Reducer | 12 | MF | Aluminum Flexible Duct | 16 |
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| SP10 | Spiral Pipe | 18 |
| SP45 | Spiral 45° Angle | 18 |
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| SP58ER | Spiral Eccentric Reducer | 18 |
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| SP90 | Spiral 90° Elbow | 18 |
| SP90LR | Spiral Long Radius 90° Elbow | 18 |
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| SYH | Aluminum Vent Hood | 16 |
| SYHBP | Brown Plastic Vent Hood | 16 |
| SYHWP | White Plastic Vent Hood | 16 |
| SWK | Single Wide Mobile Home Kit | 16 |
| TD | Trunk Duct | 3 |
| WSJ | Wallstack | 7 |
| WS7C | Center Reverse Stack Elbow | 7 |
| WS9 | Double Stackhead | 7 |
| WS10 | Stackhead | 7 |
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TECHNICAL INFORMATION

| EQUIVALENT LENGTHS | |
|---|-------------|
| PLENUM/DUCT FITTINGS | |
| No. 23 Offset starting collar | 10' EL |
| No. 20 Straight starting collar | 35' EL |
| No. 120SC Snap collar, round | 35' EL |
| ROUND ELBOWS & ANGLES | |
| 90° elbows | 30' EL |
| 45° angles | 10 - 20' EL |
| REGISTER BOOTS | |
| No. 24R 90° register boot | 30' EL |
| No. 27R Straight register boot | 5' EL |
| No. 28R End register boot | 50' EL |
| ROUND FITTINGS (TAKEOFFS) | |
| No. 97 Round starting collar | 35' EL |
| No. 63 Square to round straight | 20' EL |
| No. 63A Square to round adj. side takeoff | 50' EL |
| No. 62 Square to round top takeoff | 50' EL |
| No. 55 Round to round (adjustable) | 50' EL |
| No. 65 Round to round | 50' EL |
| DUCT ELBOWS, RADIUS THROAT | |
| No. 14 Up to 11" | 10' EL |
| 12" to 21" | 15' EL |
| 22" to 27" | 20' EL |
| 28" to 33" | 25' EL |
| DUCT ELBOWS, SQUARE THROAT | |
| No. 16S Up to 11" | 40' EL |
| 12" to 15" | 55' EL |
| 16" to 21" | 75' EL |
| 22" to 27" | 100' EL |
| 28" to 33" | 125' EL |
| RETURN AIR SYSTEM | |
| No. 810 Cold air boot, collar, duct | 45- 65' EL |

SIZING REQUIREMENTS



DUCT SIZED
per TOTAL CFM
CONVEYED and
DUCT DESIGN FACTOR

¹ ASP x 100
TOTAL EQ. LENGTH

TAKEOFF & ELBOW SIZED
per PIPE SIZE

PIPE SIZED
per CFM for this RUN
and DESIGN FACTOR

REGISTER SIZED
per STYLE, SPREAD THROW
and FREE AREA of register and
CFM requirement

BOOT COLLAR SIZED
per PIPE SIZE

BOOT OPENING SIZED
per REGISTER SIZE²
²Note: Boot sized LARGER than
FREE AIR OPENING of register

SMACNA Gauge Requirements for Galvanized Steel

| Duct Diameter | 2" w.g. max Positive Pressure | Duct Diameter | 2" w.g. max Negative Pressure |
|---------------|-------------------------------|---------------|-------------------------------|
| 3" - 8" | 28 Ga | 6" - 10" | 28 Ga |
| 9" - 14" | 26 Ga | 12" | 26 Ga |
| 15" - 26" | 24 Ga | 14" - 16" | 24 Ga |
| | | 18" - 20" | 22 Ga |
| | | 22" - 26" | 20 Ga |

From: SMACNA HVAC Duct Construction Standards Metal and Flexible, 2nd Ed (1995), 3.3 & 3.8

SUPPLY OR RETURN DUCT SIZE/CAPACITY (.09 to .10 pressure drop per 100' EL)

| CFM | ROUND (No. EL) | CAPACITY (No. EL) |
|-------|----------------|-------------------|
| 50 | 5" | 8 x 6 |
| 75 | 5" | 8 x 6 |
| 100 | 6" | 8 x 6 |
| 125 | 6" | 3 1/2 x 10 (110) |
| 150 | 7" | 8 x 6 |
| 175 | 7" | 8 x 6 |
| 200 | 7" | 8 x 6 |
| 250 | 8" | 6 x 10 |
| 300 | 9" | 6 x 10 |
| 350 | 9" | 6 x 10 |
| 400 | 9" | 8 x 10 |
| 500 | 10" | 10 x 10 |
| 600 | 12" | 10 x 10 |
| 700 | 12" | 12 x 10 |
| 800 | 12" | 12 x 10 |
| 900 | 14" | 14 x 10 |
| 1,000 | 14" | 14 x 10 |
| 1,200 | 14" | 16 x 10 |
| 1,400 | 16" | 18 x 10 |
| 1,600 | 16" | 20 x 10 |
| 1,800 | 16" | 24 x 10 |
| 2,000 | 18" | 26 x 10 |
| 2,500 | 18" | 30 x 10 |
| 3,000 | 20" | 36 x 10 |
| 3,500 | 22" | 40 x 10 |
| 4,000 | 24" | 26 x 16 |
| | | 32 x 14 |
| | | 38 x 12 |

8" Joist - 375 CFM; 10" Joist - 525 CFM (return only)

ADJUSTMENT OF DUCT DESIGN PRESSURE (RATE) FOR EQUIVALENT LENGTHS

| Total Effective Length (Feet) | .05 | .06 | .08 | .10 | .125 | .14 | .16 | .18 | .20 | .25 | .30 | .34 | .375 | .40 | .50 | .625 | .75 | 1.00 |
|-------------------------------|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 35 - 44 | .13 | .15 | .20 | .25 | .32 | .35 | .40 | .45 | .50 | .63 | .75 | .85 | .95 | 1.00 | 1.25 | 1.50 | 1.90 | 2.54 |
| 45 - 54 | .10 | .12 | .16 | .20 | .25 | .28 | .32 | .36 | .40 | .50 | .60 | .68 | .76 | .80 | 1.00 | 1.26 | 1.52 | 2.02 |
| 55 - 64 | .08 | .10 | .13 | .17 | .21 | .23 | .27 | .30 | .33 | .42 | .50 | .57 | .63 | .67 | .83 | 1.05 | 1.26 | 1.68 |
| 65 - 74 | .07 | .09 | .11 | .14 | .18 | .20 | .23 | .26 | .29 | .36 | .43 | .49 | .54 | .57 | .72 | .90 | 1.08 | 1.44 |
| 75 - 84 | .06 | .08 | .10 | .13 | .16 | .18 | .20 | .23 | .25 | .31 | .38 | .43 | .47 | .50 | .63 | .79 | .94 | 1.26 |
| 85 - 94 | .06 | .07 | .09 | .11 | .14 | .16 | .18 | .20 | .22 | .28 | .33 | .38 | .42 | .45 | .56 | .70 | .84 | 1.12 |
| 95 - 104 | .05 | .06 | .08 | .10 | .13 | .14 | .16 | .18 | .20 | .25 | .30 | .33 | .38 | .40 | .50 | .63 | .75 | 1.01 |
| 105 - 114 | .05 | .05 | .07 | .09 | .11 | .13 | .15 | .16 | .18 | .23 | .28 | .31 | .34 | .37 | .47 | .57 | .69 | .91 |
| 115 - 129 | .04 | .05 | .07 | .08 | .10 | .12 | .13 | .15 | .17 | .21 | .25 | .28 | .31 | .33 | .46 | .51 | .62 | .82 |
| 130 - 149 | .04 | .04 | .06 | .07 | .09 | .10 | .11 | .13 | .14 | .18 | .21 | .24 | .27 | .29 | .36 | .45 | .54 | .72 |
| 150 - 169 | .03 | .04 | .05 | .06 | .08 | .09 | .10 | .11 | .13 | .16 | .19 | .21 | .24 | .25 | .31 | .39 | .47 | .63 |
| 170 - 189 | .03 | .03 | .04 | .06 | .07 | .08 | .09 | .10 | .11 | .14 | .17 | .19 | .21 | .22 | .28 | .35 | .42 | .56 |
| 190 - 214 | .03 | .03 | .04 | .05 | .06 | .07 | .08 | .09 | .10 | .13 | .15 | .17 | .19 | .20 | .25 | .31 | .37 | .50 |
| 215 - 239 | .02 | .03 | .04 | .05 | .05 | .06 | .07 | .08 | .09 | .11 | .13 | .15 | .17 | .18 | .22 | .28 | .33 | .44 |
| 240 - 264 | .02 | .02 | .03 | .04 | .05 | .06 | .06 | .07 | .08 | .10 | .12 | .14 | .15 | .16 | .20 | .25 | .30 | .40 |
| 265 - 289 | .02 | .02 | .03 | .04 | .04 | .05 | .06 | .07 | .07 | .09 | .11 | .12 | .14 | .15 | .18 | .23 | .27 | .36 |
| 290 - 324 | .02 | .02 | .03 | .03 | .04 | .05 | .05 | .06 | .07 | .08 | .10 | .11 | .12 | .13 | .17 | .20 | .24 | .33 |
| 325 - 374 | .02 | .02 | .02 | .03 | .04 | .04 | .05 | .05 | .06 | .07 | .09 | .10 | .11 | .11 | .14 | .18 | .21 | .29 |
| 375 - 424 | .01 | .02 | .02 | .03 | .03 | .04 | .04 | .05 | .05 | .06 | .08 | .09 | .09 | .10 | .13 | .16 | .19 | .25 |
| 425 - 474 | .01 | .01 | .02 | .03 | .03 | .03 | .04 | .04 | .05 | .06 | .07 | .08 | .08 | .09 | .11 | .14 | .17 | .22 |
| 475 - 524 | .01 | .01 | .02 | .02 | .03 | .03 | .03 | .04 | .04 | .05 | .06 | .07 | .07 | .08 | .10 | .13 | .15 | .20 |
| 525 - 574 | .01 | .01 | .02 | .02 | .02 | .03 | .03 | .03 | .04 | .05 | .06 | .07 | .07 | .07 | .09 | .11 | .14 | .18 |
| 575 - 625 | .01 | .01 | .01 | .02 | .02 | .02 | .03 | .03 | .03 | .04 | .05 | .06 | .06 | .07 | .08 | .10 | .13 | .17 |

FORMULAS

Sensible Heat Formula

$$BTU/Hour = CFM \times TD \times 1.1$$

$$CFM = \frac{BTU/Hour}{1.1 \times TD \times ACF}$$

1.1 is a conversion factor

TD is the Temperature Difference created by the appliance

ACF is the Altitude Correction Factor (see above table)

Altitude Correction Factor (ACF)

| | | | |
|---------|------|----------|------|
| 0 ft | 1.0 | 5000 ft | .826 |
| 500 ft | .981 | 6000 ft | .801 |
| 1000 ft | .962 | 7000 ft | .772 |
| 2000 ft | .926 | 8000 ft | .749 |
| 3000 ft | .891 | 9000 ft | .715 |
| 4000 ft | .858 | 10000 ft | .687 |

Sensible Heat Ratio = $\frac{\text{Sensible Load}}{\text{Sensitive Load} + \text{Latent Load}}$

SHR below .80 = 21° TD High humidity = 350 CFM/ton

SHR .80 to .85 = 19° TD Ave. humidity = 400 CFM/ton

SHR above .85 = 17° TD Low humidity = 450 CFM/ton

$$CFM = \frac{\text{Sensible Load}}{1.1 \times TD \times ACF}$$

Total Heat Equation

$$CFM = \frac{BTU/Hr}{4.5 \times H \times ACF}$$

4.5 is a conversion factor H is the BTU per lb. of air removed

Friction Rate

*%used in duct calculators

$$\text{Friction Rate} = \frac{\text{Pressure Drop} \times 100}{TEL}$$

Pressure Drop is the available static pressure (ASP) allocated to the duct work.

ASP = Blower Static Pressure - Component Pressure Drops

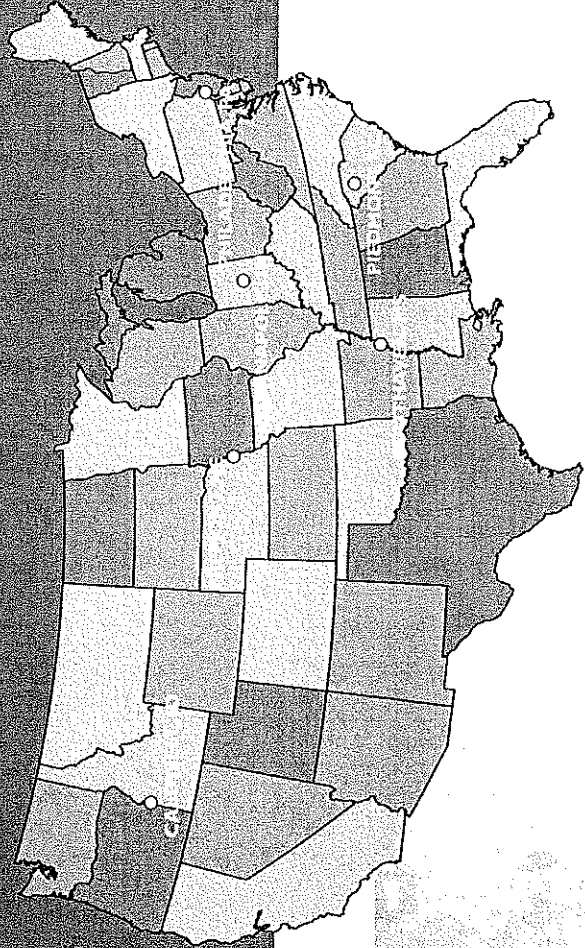
TEL is the Total Effective Length of the longest supply run and the longest return run.

CFM Calculations

$$\text{Room CFM} = \frac{\text{Blower CFM} \times \text{Room Load}}{\text{Equipment Sizing Load}}$$

$$\text{Flow Factor} = \frac{\text{Blower CFM}}{\text{Equipment Sizing Load}}$$

$$\text{Room CFM} = \text{Flow Factor} \times \text{Room Load}$$



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