



SUBMITTAL AND PRODUCT SPECIFICATIONS

## RECTANGULAR DUCTS FOR HVAC, VENTILATION AND AIR EXTRACTION SYSTEMS





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### Rectangular Ducts:

Rectangular ducting has ability to move large volumes of air in low-rise areas, it is also more commonly used in exterior ventilation projects where visual appearance is less important.

They are usually made of galvanized metal, they can be sectioned to facilitate transport and installation.

### A. Ductos Rectangulares y Piezas:

1. All ducts and ductwork parts will be manufactured with galvanized steel in accordance to the 2005 Third Edition of the SMACNA Standard "HVAC DUCT CONSTRUCTION STANDARDS".
2. G-60 or G-90 galvanized sheet will be used in accordance to the project, with specification ASTM A 653.
3. Adapting to the Maximum Dimension of the rectangular duct or piece of ductwork (elbows, reductions, etc.) the following caliber will be used:



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**Up to 10in of positive pressure: Coupling each 47-1/4in**

Max. Dimension	Connection	Nominal Length (Max S&D, TDF) 44-46in
Up to 10"	S/D	Gauge 26
11"-12"	S/D	Gauge 26
13"-14"	S/D	Gauge 26
15"-16"	S/D	Gauge 26
17"-18"	TDF	Gauge 26
19"-20"	TDF	Gauge 26
21"-22"	TDF	Gauge 26
23"-24"	TDF	Gauge 26
25"-26"	TDF	Gauge 26
27"-28"	TDF	Gauge 26
29"-30"	TDF	Gauge 26
31"-36"	TDF	Gauge 26
37"-42"	TDF	Gauge 24
43"-48"	TDF	Gauge 24
49"-54"	TDF	Gauge 22
55"-60"	TDF	Gauge 22
61"-72"	TDF	Gauge 20





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**Up to 10in of positive pressure: Coupling each 59-1/16in**

Max. Dimension	Connection	Nominal Length (Max S&D, TDF) 44-46in
Up to 10"	S/D	Gauge 26
11"-12"	S/D	Gauge 26
13"-14"	S/D	Gauge 26
15"-16"	S/D	Gauge 26
17"-18"	TDF	Gauge 26
19"-20"	TDF	Gauge 26
21"-22"	TDF	Gauge 26
23"-24"	TDF	Gauge 26
25"-26"	TDF	Gauge 26
27"-28"	TDF	Gauge 26
29"-30"	TDF	Gauge 26
31"-36"	TDF	Gauge 26
37"-42"	TDF	Gauge 24
43"-48"	TDF	Gauge 24
49"-54"	TDF	Gauge 22
55"-60"	TDF	Gauge 22
61"-72"	TDF	Gauge 20



## RECTANGULAR DUCTS FOR HVAC, VENTILATION AND AIR EXTRACTION SYSTEMS

### 2" Positive Pressure

Max. Dimension	Connection	Nominal Length (Max S&D, TDF) 44-46in
Up to 10"	S/D	Gauge 26
11"-12"	S/D	Gauge 26
13"-14"	S/D	Gauge 26
15"-16"	S/D	Gauge 26
17"-18"	TDF	Gauge 26
19"-20"	TDF	Gauge 26
21"-22"	TDF	Gauge 26
23"-24"	TDF	Gauge 26
25"-26"	TDF	Gauge 26
27"-28"	TDF	Gauge 24
29"-30"	TDF	Gauge 24
31"-36"	TDF	Gauge 24
37"-42"	TDF	Gauge 22
43"-48"	TDF	Gauge 20
49"-54"	TDF	Gauge 22 MPT
55"-60"	TDF	Gauge 22 MPT
61"-72"	TDF	Gauge 20 JTR

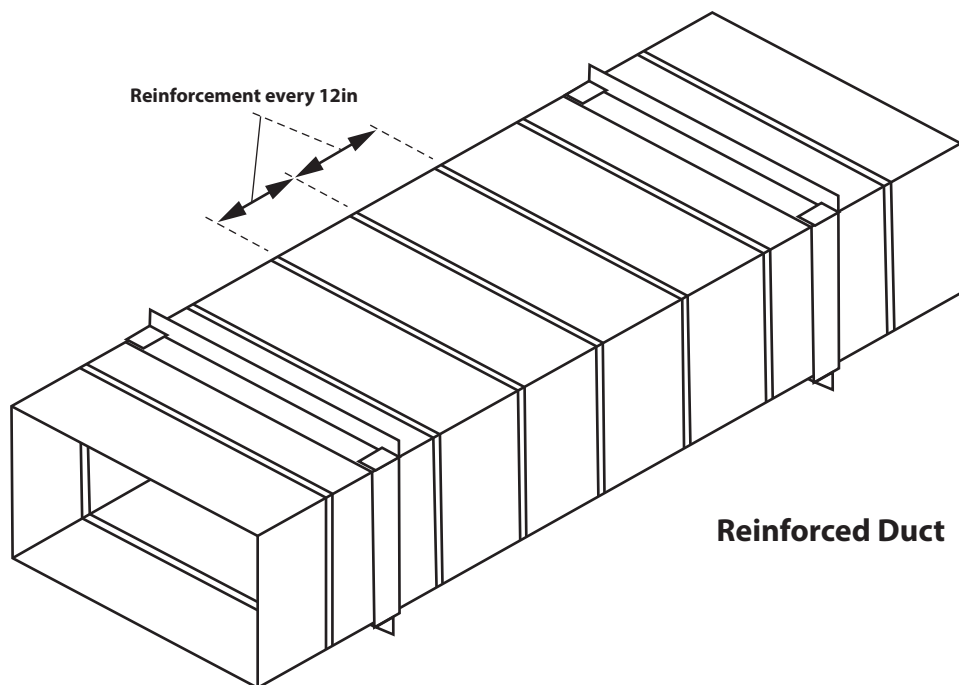
**MPT.** Center Reinforcement.

**JTR.** Three point Reinforcement.



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**4.** Any duct and/or part of duct with a max dimension is larger than 12in must be reinforced, being set every 12in along the length of the sheet.



**Reinforced Duct**

**5.** All the seams of the ducts and ductwork parts will be made with Snap Lock or Pittsburgh Lock (HO), except for round necks where the Grooved Seam (Lock) will be used.

**6.** Regarding the assembly of the ducts, this will be determined according to the section of the same (width + length) :

- For ducts with a section of up to 26 inches, they will be manufactured to be assembled in one section.
- For ducts with a section of up to 54 inches these will be manufactured to be assembled in two parts (Manufacture in L).
- For ducts with a section equal to or greater than 55 inches, these will be manufactured in 4 parts.

**7.** The ductwork pieces (elbows, reductions, boots, etc.) will always be manufactured in 4 parts except for round and square to round necks.



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### B. Connections and Seams:

#### Types of connections:

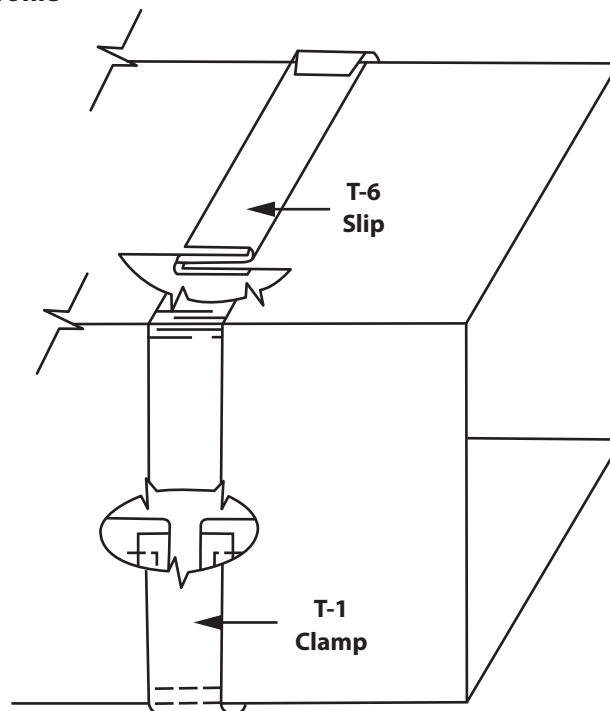
#### Slip and Clamps:



T-6 'S'  
Slip Profile



T-1  
Clamp Profile

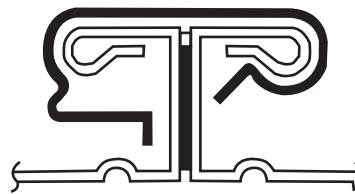


Slip and Clamp Installation

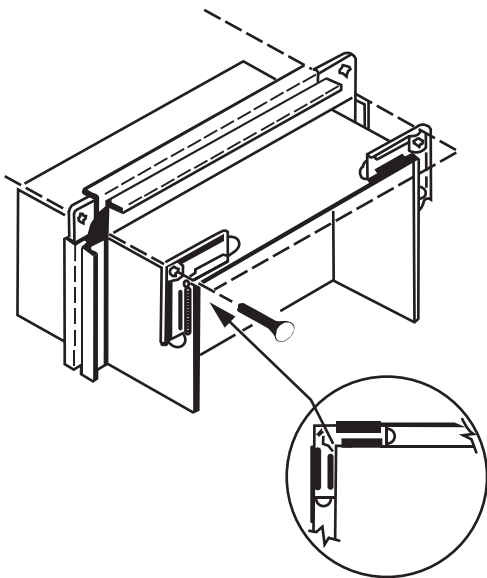


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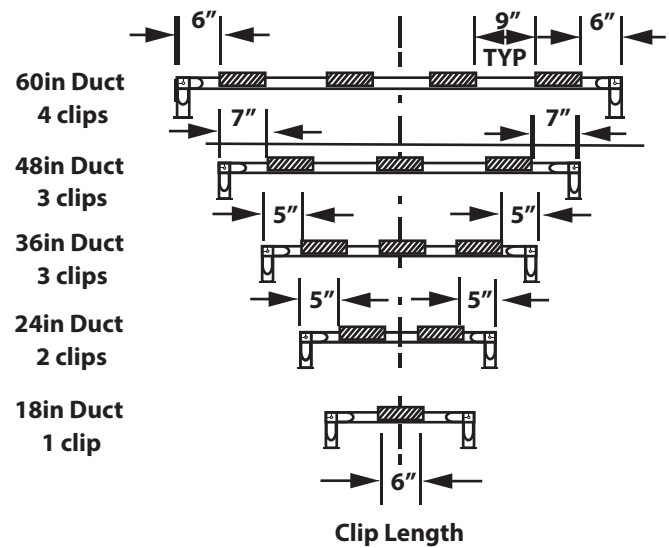
**TDF:**



**T-25b**  
**TDF profile with Clip Reinforcement**



**Corner Installations<sup>1</sup>**



**Clip Installations as Reinforcements<sup>2</sup>**

<sup>1</sup> The corner parts will be manufactured with 16 gauge sheets according to SMACNA.

<sup>2</sup> The clips will be manufactured with 22 gauge sheets according to SMACNA.

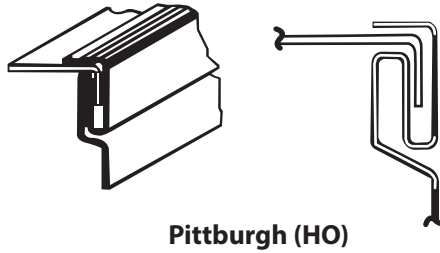




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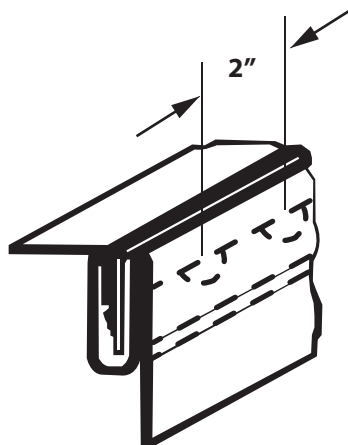
### Types of Seams:

#### Pittsburgh (HO):



Pittsburgh (HO)

#### Button Punch Snap Lock:



L-2



## RECTANGULAR DUCTS FOR HVAC, VENTILATION AND AIR EXTRACTION SYSTEMS

- Exploded views will be delivered by the client following the attached order form.
- The information of each piece to be manufactured will be placed following the guidelines of the order forms.
- Parts not found on the parts sheets will need to be drawn and ordered by customer as special requirement.



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