

## Rectangular Duct Standards

2" W.G. Positive or Negative					
	Duct Dimension	Joint Connection	Max Length	Metal Gauge	Reinforcing Size and Longitudinal Spacing
Width	0" – 12"	Flat "S" Slip	59"	26	Transverse Connection 59" O.C.
Depth	0" – 30"	Drive Slip			
Width	13" – 20"	1" Standard "S" Slip	59"	26	Transverse Connection 59" O.C.
Depth	0" – 30"	Drive Slip			
Width	21" – 26"	1 5/8" Standard "S" Slip	59"	26	Transverse Connection 59" O.C.
Depth	0" – 30"	Drive Slip			
Width	27" – 36"	1 5/8" Standard "S" Slip	59"	24	Transverse Connection 59" O.C.
Depth	0" – 30"	Drive Slip			
Width	37" – 42"	1 5/8" Standing "S" Slip	59"	24	Transverse Connection 59" O.C. 1 1/2" x 1" x 18 ga. @ 48"
Depth	0" – 30"	Drive Slip			
Width	43" – 48"	1 5/8" Standard "S" Slip	59"	24	Transverse Connection 59" O.C. 1 1/2" x 1" x 18 ga. @ 36"
Depth	0" – 30"	Drive Slip			
Width	49" – 54"	1 5/8" Standing "S" Slip	59"	24	Transverse Connection 59" O.C. 1 1/2" x 1" x 18 ga. @ 30"
Depth	0" – 30"	Drive Slip			
Width	55" – 60"	*TDF Flange	56"	22	Transverse Connection 56" O.C. 1 1/2" x 1" x 16 ga. @ 36"
Depth	0" – 30"	*TDF Flange			
Width	61" – 84"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. @ 48"
Depth	0" – 30"	*TDF Flange			
Width	85" – 96"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. @ 36"
Depth	0" – 30"	*TDF Flange			

1. Reference: 2020 SMACNA for +/- 2" W.G.
2. All duct to be fabricated from G90 galvanized sheets.
3. All duct to be stiffened with machine-formed beads at 12" O.C.
4. All reinforcing to be galvanized.
5. All reinforcing to be secured to duct with screws at 8" O.C.
6. All drives over 18" to be reinforced by others.
7. Longitudinal seams to be snap-lock through 22 gauge and Pittsburgh for over 22 gauge.
8. \* Reinforce all TDF Flange 55" and over with tie rod maximum 48" O.C. at each end except where heavier gauge is used in lieu of gauge specified for that size.

## 3" W.G. Positive or Negative

	Duct Dimension	Joint Connection	Max Length	Metal Gauge	Reinforcing Size and Longitudinal Spacing
Width	0" – 26"	TDF Flange	56"	24	Transverse Connection 56" O.C.
Depth					
Width	27" – 30"	TDF Flange	56"	24	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 48" from Connection
Depth					
Width	31" – 36"	TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 48" from Connection
Depth					
Width	37" – 42"	TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 36" from Connection
Depth					
Width	43" – 48"	*TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 16 ga. "Z" Maximum 36" from Connection
Depth					
Width	49" – 54"	*TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 16 ga. "Z" Maximum 30" from Connection
Depth					
Width	55" – 72"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 36" from Connection
Depth					
Width	73" – 84"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 24" from Connection
Depth					
Width	85" – 96"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 24" from Connection
Depth					
Width	97" – 108"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 12 ga. "Z" Maximum 24" from Connection OR 3" x 1 1/8" x 10 ga. "Z" Maximum 30" from Connection
Depth					
Width	109" – 120"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 12 ga. "Z" Maximum 24" from Connection OR 3" x 1 1/8" x 10 ga. "Z" Maximum 30" from Connection
Depth					

1. Reference: 2020 SMACNA for +/- 3" W.G.
2. All duct to be fabricated from G90 galvanized sheets.
3. All duct to be stiffened with machine-formed beads at 12" O.C.
4. All reinforcing to be galvanized.
5. All reinforcing to be secured to duct with screws at 8" O.C.
6. Longitudinal seams to be Pittsburgh.
7. \* Reinforce all TDF Flange 43" and over with tie rod maximum 48" O.C. at each end except where heavier gauge is used in lieu of gauge specified for that size.

## 4" W.G. Positive or Negative

	Duct Dimension	Joint Connection	Max Length	Metal Gauge	Reinforcing Size and Longitudinal Spacing
Width Depth	0" – 22"	TDF Flange	56"	24	Transverse Connection 56" O.C.
Width Depth	23" – 26"	TDF Flange	56"	24	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 48" from Connection
Width Depth	27" – 30"	TDF Flange	56"	24	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 36" from Connection
Width Depth	31" – 36"	TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 36" from Connection
Width Depth	37" – 42"	*TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 16 ga. "Z" Maximum 36" from Connection
Width Depth	43" – 60"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 36" from Connection
Width Depth	61" – 72"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	73" – 84"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	85" – 96"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	97" – 120"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 10 ga. "Z" Maximum 30" from Connection

1. Reference: 2020 SMACNA for +/- 4" W.G.
2. All duct to be fabricated from G90 galvanized sheets.
3. All duct to be stiffened with machine-formed beads at 12" O.C.
4. All reinforcing to be galvanized.
5. All reinforcing to be secured to duct with screws at 8" O.C.
6. Longitudinal seams to be Pittsburgh.
7. \* Reinforce all TDF Flange 37" and over with tie rod maximum 48" O.C. at each end except where heavier gauge is used in lieu of gauge specified for that size.
8. Where reinforcing is required ONLY on two sides, a frame will be provided.

## 6" W.G. Positive or Negative

	Duct Dimension	Joint Connection	Max Length	Metal Gauge	Reinforcing Size and Longitudinal Spacing
Width Depth	0" – 12"	TDF Flange	56"	24	Transverse Connection 56" O.C.
Width Depth	13" – 24"	TDF Flange	56"	22	Transverse Connection 56" O.C.
Width Depth	25" – 30"	TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 36" from Connection
Width Depth	31" – 36"	*TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 16 ga. "Z" Maximum 30" from Connection
Width Depth	37" – 42"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	43" – 60"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	61" – 72"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	73" – 84"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 12 ga. "Z" Maximum 24" from Connection OR 3" x 1 1/8" x 10 ga. "Z" Maximum 30" from Connection
Width Depth	85" – 108"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 10 ga. "Z" Maximum 24" from Connection

1. Reference: 2020 SMACNA for +/- 6" W.G.
2. All duct to be fabricated from G90 galvanized sheets.
3. All duct to be stiffened with machine-formed beads at 12" O.C.
4. All reinforcing to be galvanized.
5. All reinforcing to be secured to duct with screws at 8" O.C.
6. Longitudinal seams to be Pittsburgh.
7. \* Reinforce all TDF Flange 31" and over with tie rod maximum 48" O.C. at each end except where heavier gauge is used in lieu of gauge specified for that size.
8. Where reinforcing is required ONLY on two sides, a frame will be provided.

## 10" W.G. Positive or Negative

	Duct Dimension	Joint Connection	Max Length	Metal Gauge	Reinforcing Size and Longitudinal Spacing
Width Depth	0" – 8"	TDF Flange	56"	24	Transverse Connection 56" O.C.
Width Depth	9" – 12"	TDF Flange	56"	24	Transverse Connection 56" O.C. 1" x 1" x 18 ga. "Z" Maximum 48" from Connection
Width Depth	13" – 18"	TDF Flange	56"	24	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 36" from Connection
Width Depth	19" – 22"	TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 18 ga. "Z" Maximum 36" from Connection
Width Depth	23" – 26"	*TDF Flange	56"	22	Transverse Connection 56" O.C. 1 ½" x 1" x 16 ga. "Z" Maximum 36" from Connection
Width Depth	27" – 36"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 36" from Connection
Width Depth	37" – 42"	*TDF Flange	56"	20	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	43" – 48"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 2" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	49" – 54"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 2" x 1 1/8" x 10 ga. "Z" Maximum 30" from Connection
Width Depth	55" – 60"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 12 ga. "Z" Maximum 30" from Connection
Width Depth	61" – 72"	*TDF Flange	56"	18	Transverse Connection 56" O.C. 3" x 1 1/8" x 10 ga. "Z" Maximum 30" from Connection
Width Depth	73" – 84"	*Ward J	60"	16	Transverse Connection 60" O.C. 3" x 1 1/8" x 10 ga. "Z" Maximum 30" from Connection
Width Depth	85" – 120"	*Ward J	60"	16	Transverse Connection 60" O.C. **3" x 1 1/8" x 10 ga. "Z" Maximum 24" from Connection

1. Reference: 2020 SMACNA for +/- 10" W.G.
2. All duct to be fabricated from G90 galvanized sheets.
3. All duct to be stiffened with machine-formed beads at 12" O.C.
4. All reinforcing to be galvanized.
5. All reinforcing to be secured to duct with screws at 8" O.C.
6. Longitudinal seams to be Pittsburgh.
7. \*Reinforce all Ward J and TDF Flange 23" and over with tie rod 48" maximum at each end except where heavier gauge is used in lieu of gauge specified for that size.
8. \*\*Reinforce Z-bar 85" and over with tie rod at 48" maximum.