

DIMENSIONS

Redefine your comfort zone.™ | www.titus-hvac.com

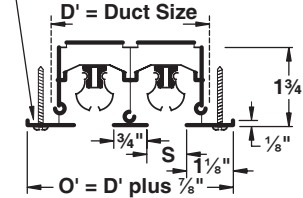
ML / MLR UNIT DIMENSIONS

Note: See page F18 for duct dimensions

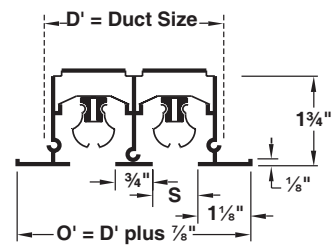
Border Types 1A, 1B both with

- Flange Border
- (1A) Screw Mounting
- (1B) Duct Mounting/lay-in application, No Screw Holes

Countersunk Screwholes for #8 SMS (5/16" from edge)



Border Type 1A

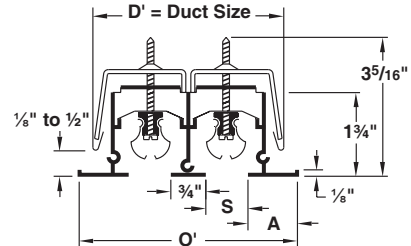


Border Type 1B

Border Types 2A, 2B both with

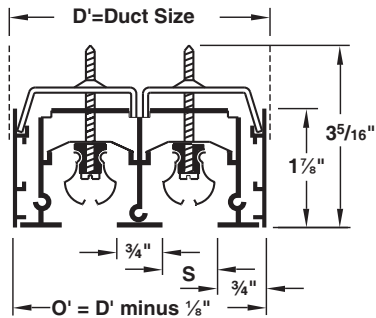
- Flange Border
- Concealed Mounting

Type	A	O'
2A	1 1/8"	D' + 3/4"
2B	7/8"	D' + 1/4"



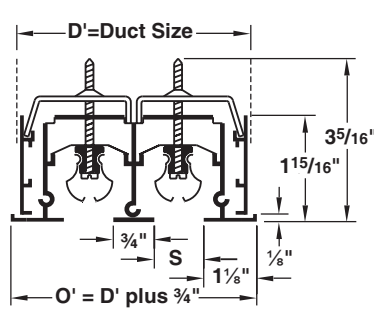
Frame & Border Type 3 with

- Flush Border
- Concealed Mounting



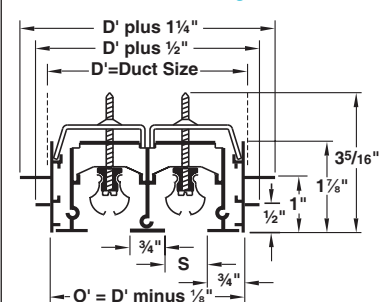
Frame & Border Type 4 with

- Flange Border
- Concealed Mounting



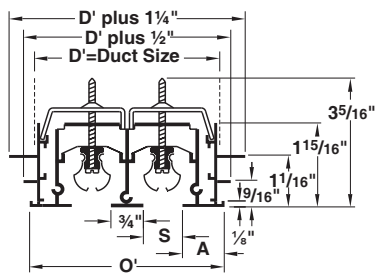
Frame & Border Type 6 with

- Plaster & Tile Mounting Frame
- Flush Border
- Concealed Mounting



Frame & Border Types 7A, 7B with

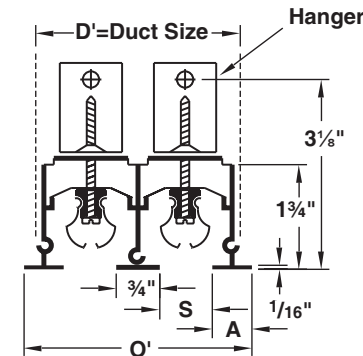
- Plaster & Tile Mounting Frame
- Flange Border
- Concealed Mounting



Type	A	O'
7A	1 1/8"	D' + 3/4"
7B	7/8"	D' + 1/4"

Border Types 9A, 9B with

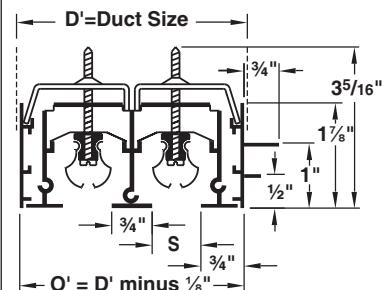
- Flange Border
- Ceiling Hangers



Type	A	O'
9A	3/4"	D' + 5/8"
9B	1 1/8"	D' + 1 3/8"

Border Type 11 with

- Perimeter Plaster & Tile Mounting Frame
- Flush Border
- Concealed Mounting



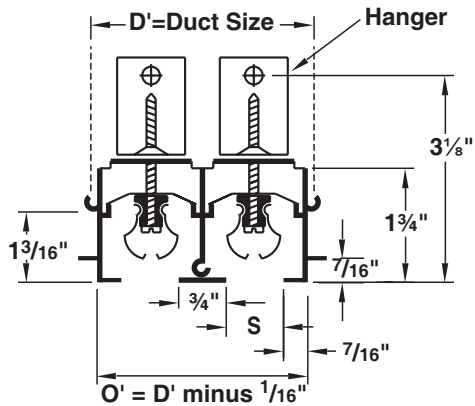
FRAME AND BORDER TYPES

FRAME AND BORDER TYPES

ML / MLR UNIT DIMENSIONS

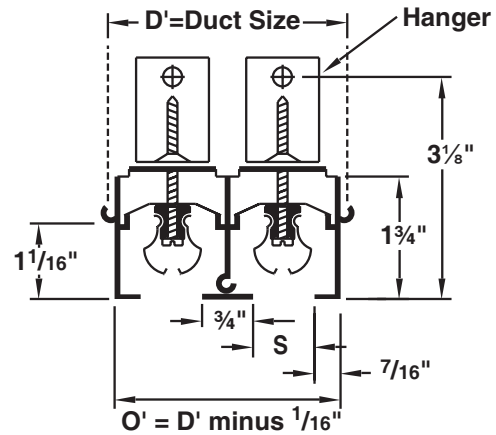
Border Type 12 with

- Spline Border
- Ceiling Hangers



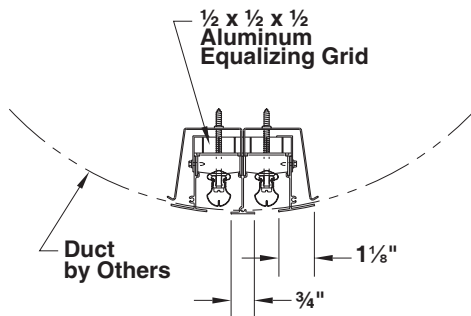
Border Type 15 with

- Flush Border
- Ceiling Hangers



Border Type 16 with

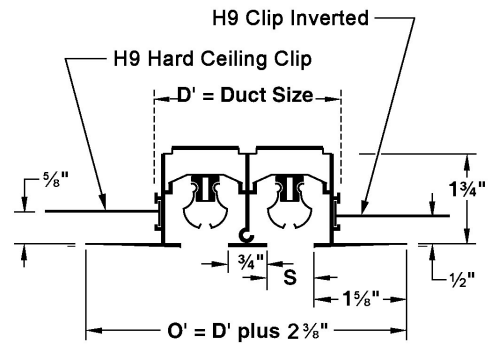
- Curved Flange Border
- Concealed Mounting
- Equalizing Grid



Standard selections: ML-38 and ML-39 only
 1 slot: duct diameters 10, 12, 14, 16, 18, 20, 22, 24"
 2 slot: duct diameters 12, 14, 16, 18, 20, 22, 24"
 3 slot: duct diameters 14, 16, 18, 20, 22, 24, 26, 28, 30"
 4 slot: duct diameters 20, 22, 24, 26, 28, 30, 32"

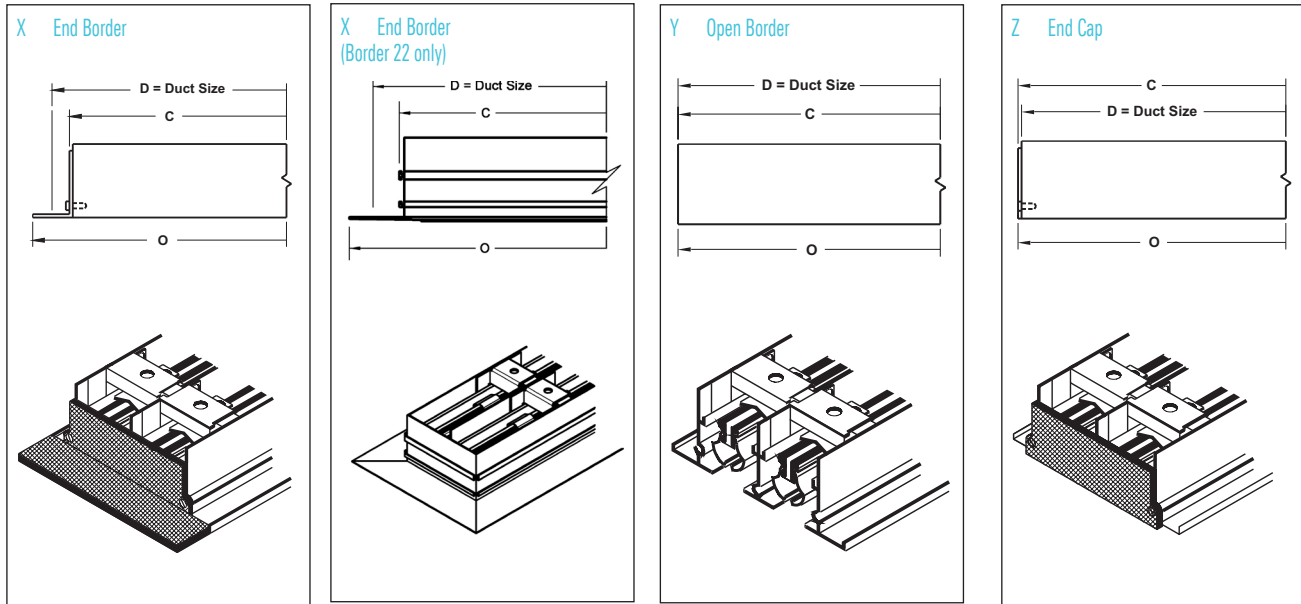
Border Type 22 with

- Tape & Spackle Border
- H9 Hard Ceiling Clip



Note: ML-37 is not available for Border 22

END FABRICATION



OVERALL LENGTH FOR VARIOUS END FABRICATIONS

Frame and/or Border Type	X X		X Y		X Z		Y Y		Y Z		Z Z	
	X-X		X-Y		X-Z		Y-Y		Y-Z		Z-Z	
	C	O	C	O	C	O	C	O	C	O	C	O
1A, 1B, 9B	$D - 1\frac{3}{8}$	$D + \frac{3}{4}$	$D - \frac{11}{16}$	$D + \frac{3}{8}$	$D - \frac{5}{8}$	$D + \frac{7}{16}$	D	D	$D + \frac{1}{16}$	$D + \frac{1}{16}$	$D + \frac{1}{8}$	$D + \frac{1}{8}$
2A, 4, 7A	$D - 1\frac{3}{8}$	$D + \frac{3}{4}$	$D - \frac{11}{16}$	$D + \frac{3}{8}$	$D - \frac{5}{8}$	$D + \frac{7}{16}$	D	D	$D + \frac{1}{16}$	$D + \frac{1}{16}$	$D + \frac{1}{8}$	$D + \frac{1}{8}$
3, 6, 11	$D - 1\frac{3}{8}$	D	$D - \frac{11}{16}$	D	$D - \frac{5}{8}$	$D + \frac{1}{16}$	D	D	$D + \frac{1}{16}$	$D + \frac{1}{16}$	$D + \frac{1}{8}$	$D + \frac{1}{8}$
2B, 7B	$D - 1\frac{3}{8}$	$D + \frac{1}{4}$	$D - \frac{11}{16}$	$D + \frac{1}{8}$	$D - \frac{5}{8}$	$D + \frac{3}{16}$	D	D	$D + \frac{1}{16}$	$D + \frac{1}{16}$	$D + \frac{1}{8}$	$D + \frac{1}{8}$
9A	$D - 1\frac{3}{8}$	D	$D - \frac{11}{16}$	D	$D - \frac{5}{8}$	$D + \frac{1}{16}$	D	D	$D + \frac{1}{16}$	$D + \frac{1}{16}$	$D + \frac{1}{8}$	$D + \frac{1}{8}$
12, 15	$D - \frac{11}{16}$	D	$D - \frac{5}{16}$	D	$D - \frac{1}{4}$	$D + \frac{1}{16}$	D	D	$D + \frac{1}{16}$	$D + \frac{1}{16}$	$D + \frac{1}{8}$	$D + \frac{1}{8}$
16	$D - 1\frac{3}{8}$	$D + \frac{3}{4}$	$D - \frac{11}{16}$	$D + \frac{3}{8}$	N/A	N/A	D	D	N/A	N/A	N/A	N/A
22	$D - 1\frac{3}{16}$	$D + 1\frac{1}{16}$	$D - \frac{19}{32}$	$D + \frac{17}{32}$	N/A	N/A	D	D	N/A	N/A	N/A	N/A

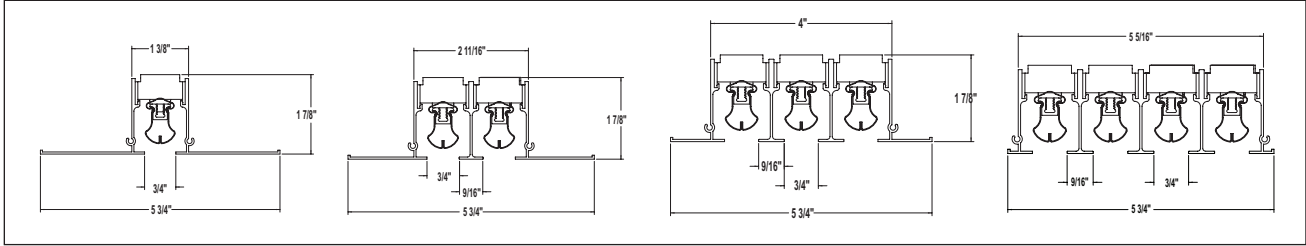
DUCT DIMENSION D' (WIDTH) FOR VARIOUS FRAME & BORDER TYPES

No. of Slots	Types 1A, 1B			Types 2A, 2B, 4, 7A, 7B, 16			Types 3, 6, 11			Types 9A, 9B, 12, 15, 22		
	ML/MLR 37	ML/MLR 38	ML/MLR 39	ML/MLR 37	ML/MLR 38	ML/MLR 39	ML/MLR 37	ML/MLR 38	ML/MLR 39	ML/MLR 37	ML/MLR 38	ML/MLR 39
	S = 1/2	S = 3/4	S = 1	S = 1/2	S = 3/4	S = 1	S = 1/2	S = 3/4	S = 1	S = 1/2	S = 3/4	S = 1
1	1 ⁷ / ₈	2 ¹ / ₈	2 ³ / ₈	2	2 ¹ / ₄	2 ¹ / ₂	2	2 ³ / ₈	2 ⁵ / ₈	1 ³ / ₈	1 ⁵ / ₈	1 ⁷ / ₈
2	3 ¹ / ₈	3 ⁵ / ₈	4 ¹ / ₈	3 ¹ / ₄	3 ³ / ₄	4 ¹ / ₄	3 ³ / ₈	3 ⁷ / ₈	4 ³ / ₈	2 ⁵ / ₈	3 ¹ / ₈	3 ⁵ / ₈
3	4 ³ / ₈	5 ¹ / ₈	5 ⁷ / ₈	4 ¹ / ₂	5 ¹ / ₄	6	4 ⁵ / ₈	5 ³ / ₈	6 ¹ / ₈	3 ⁷ / ₈	4 ⁵ / ₈	5 ³ / ₈
4	5 ⁵ / ₈	6 ⁵ / ₈	7 ⁵ / ₈	5 ³ / ₄	6 ³ / ₄	7 ³ / ₄	5 ⁷ / ₈	6 ⁷ / ₈	7 ⁷ / ₈	5 ¹ / ₈	6 ¹ / ₈	7 ¹ / ₈
5	6 ⁷ / ₈	8 ¹ / ₈	9 ³ / ₈	7	8 ¹ / ₄	9 ¹ / ₂	7 ¹ / ₈	8 ³ / ₈	9 ⁵ / ₈	6 ³ / ₈	7 ⁵ / ₈	8 ⁷ / ₈
6	8 ¹ / ₈	9 ⁵ / ₈	11 ¹ / ₈	8 ¹ / ₄	9 ³ / ₄	11 ¹ / ₄	8 ³ / ₈	9 ⁷ / ₈	11 ³ / ₈	7 ⁵ / ₈	9 ¹ / ₈	10 ⁵ / ₈
7	9 ³ / ₈	11 ¹ / ₈	12 ⁷ / ₈	9 ¹ / ₂	11 ¹ / ₄	13	9 ⁵ / ₈	11 ³ / ₈	13 ¹ / ₈	8 ⁷ / ₈	10 ⁵ / ₈	12 ³ / ₈
8	10 ⁵ / ₈	12 ⁵ / ₈	14 ⁵ / ₈	10 ³ / ₄	12 ³ / ₄	14 ³ / ₄	10 ⁷ / ₈	12 ⁷ / ₈	14 ⁷ / ₈	10 ¹ / ₈	12 ¹ / ₈	14 ¹ / ₈

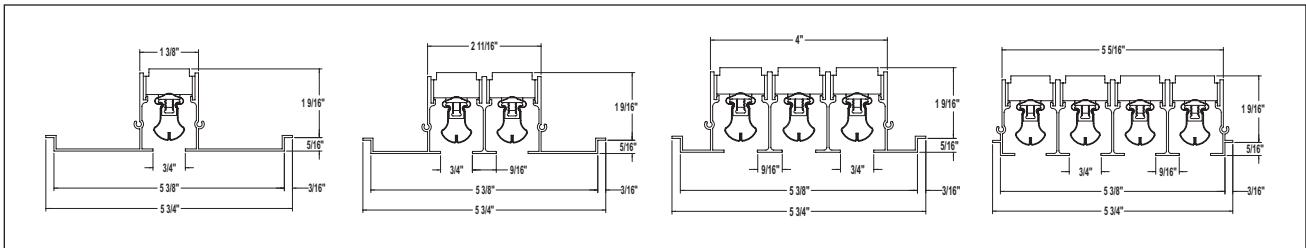
ML / MLR-37 Not Available in Type 22

BORDER TYPES - ML-TZ, MLR-TZ

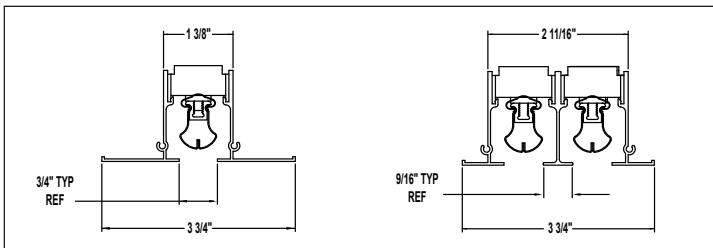
BORDER LT (LAY-IN T-BAR) FOR 6" NOMINAL WIDTH



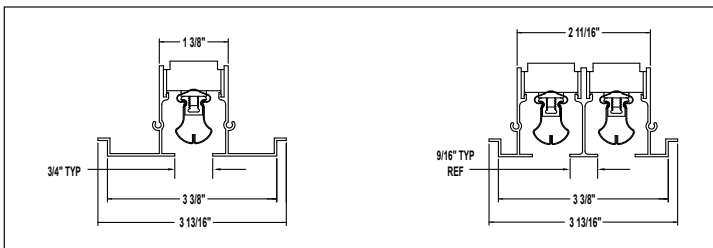
BORDER NT (NARROW TEE) FOR 6" NOMINAL WIDTH



BORDER LT (LAY-IN T-BAR) FOR 4" NOMINAL WIDTH



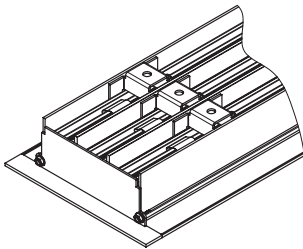
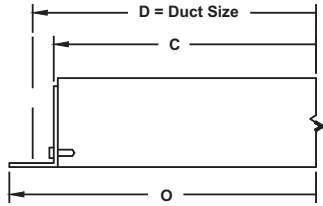
BORDER NT (NARROW TEE) FOR 4" NOMINAL WIDTH



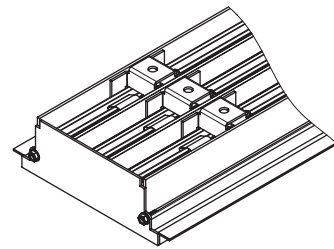
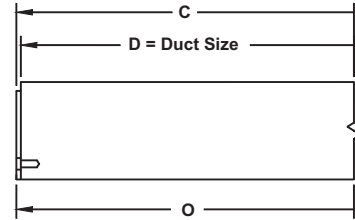
DIMENSIONS

Redefine your comfort zone.™ | www.titus-hvac.com



LT Border



NT Border



OVERALL LENGTH FOR LT AND NT BORDERS

Nominal Length (inches)	 Border LT		 NT Border	
	C	O	C	O
	24	22 ⁵ / ₈	23 ¹³ / ₁₆	23 ³ / ₈
30	28 ⁵ / ₈	29 ¹³ / ₁₆	29 ³ / ₈	29 ³ / ₈
36	34 ⁵ / ₈	35 ¹³ / ₁₆	35 ³ / ₈	35 ³ / ₈
48	46 ⁵ / ₈	47 ¹³ / ₁₆	47 ³ / ₈	47 ³ / ₈
60	58 ⁵ / ₈	59 ¹³ / ₁₆	59 ³ / ₈	59 ³ / ₈
72	70 ⁵ / ₈	71 ¹³ / ₁₆	71 ³ / ₈	71 ³ / ₈

F

DIMENSIONS