

## APPLICATION

- Recommended for heating, cooling, or general ventilation applications
- Supply or return air systems
- Sill installation blankets glass or outer walls.
- High sidewall installation gives horizontal spread.
- For floor use, Model AL1 Airline grilles are highly recommended with FG or FH borders due to heavy reinforcement. Dust deposits are easily cleaned by removing the core from its frame.
- Ceiling installed models are available with welded-in cores.

## PRODUCT FEATURES

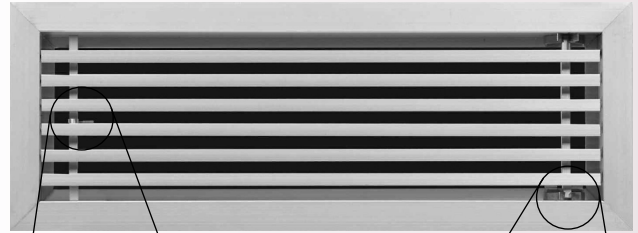
- Heavy gauge, extruded aluminum construction
- Removable core (up to 18" height) separates from its frame – no need for a “frame in a frame” or sub-frame assembly. Easy accessibility to ducts for servicing or cleaning purposes, or for air flow adjustment.
- 5 border types for application flexibility. Style FG & FH borders include floor reinforcement beams for floor mounting applications.
- Thinline models include 1/8" wide bars on 1/4" (Model TL1N) or 1/2" centers (Model TL1W)
- Airline models include 1/4" wide bars on 1/2" centers (Model AL)
- Core deflection angles of 0°, 15°, or 45° for precise directional control of supply air or return air use.
- Fastening methods include visible border screws, or concealed mounting options.
- Arctic White baked-on finish or natural anodize.
- Lengths to 120" for full sections. Unlimited length continuous runs (96" max sections) using frame alignment strips.
- Heights from 2" to 18" (with removable core). Welded-in core construction on heights over 18" (cores non-removable).

## GRILLE OPTIONS

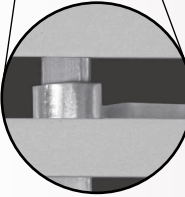
- Floor reinforcement “beams” on borders 6, 7, 9 (border 9 recommended for high traffic areas where a flanged frame is required).
- Factory applied gasket material to frame
- Aluminum or steel opposed blade volume control dampers – minimum 4" height. Flap damper used for heights under 4".
- Custom / optional paint colors
- Double deflection models with rear, individually adjustable blades for spread control
- Mitered corners
- Blank-off baffles
- Panel or bar type access doors
- Debris screen
- Model RC removable core frames

## UP TO 120" SINGLE PIECE CONSTRUCTION REDUCES JOINTS

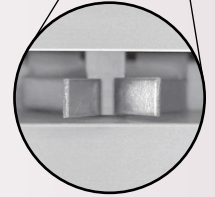
Model AL1/#7 Border



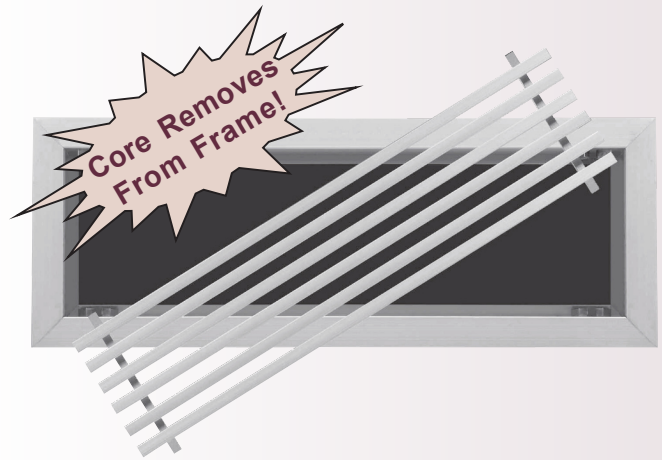
Core Attachment Options  
(cores up to 18" height)



Concealed Clip (C)



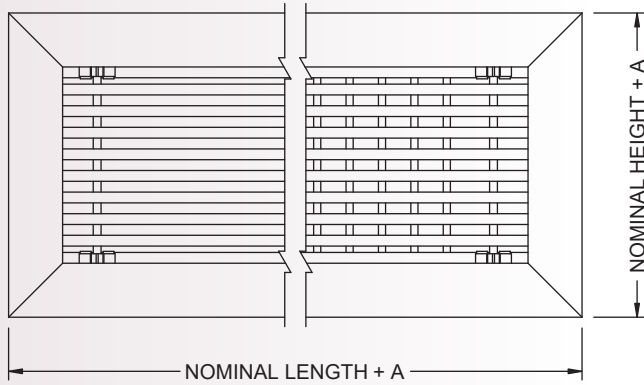
Side Clip (S)



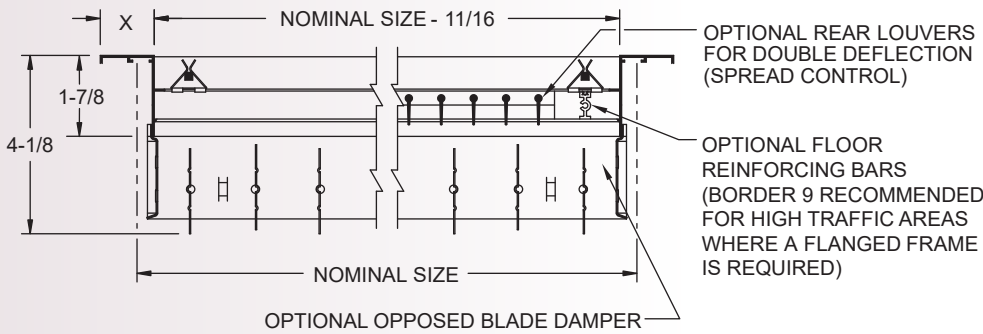
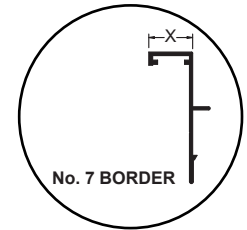
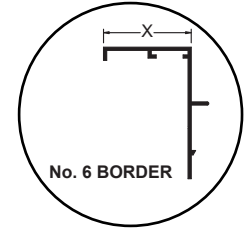
Aluminum Bar Grilles & Registers

BAR THICKNESS AND SPACING	BORDER TYPE	SINGLE DEFLECTION			DOUBLE DEFLECTION			CORE CROSS BAR SPACING
		CORE DEFLECTION			CORE DEFLECTION			
		0°	15°	45°	0°	15°	45°	
1/4" wide bars on 1/2" centers	6, 7, 9	AL 1	AL 15	AL 45	AL 2	AL 25	AL 245	10"
	6, 7, 9 w/ optional floor reinforcement	AL 1			AL 2			5"
	FG	AL 1	AL 15	AL 45	AL 2	AL 25	AL 45	5"
	FH	AL 1	AL 15		AL 2	AL 25		5"
	Core Only	AL 1	AL 15	AL 45				
1/8" wide bars on 1/2" centers	6, 7, 9	TL 1W	TL 15W		TL 2W	TL 25W		5"
	FG	TL 1W	TL 15W		TL 2W	TL 25W		5"
	FH	TL 1W	TL 15W		TL 2W	TL 25W		5"
	Core Only	TL 1W	TL 15W					
1/8" wide bars on 1/4" centers	6, 7, 9	TL 1N	TL 15N		TL 2N	TL 25N		5"
	FG	TL 1N	TL 15N		TL 2N	TL 25N		5"
	FH	TL 1N	TL 15N		TL 2N	TL 25N		5"
	Core Only	TL 1N	TL 15N					

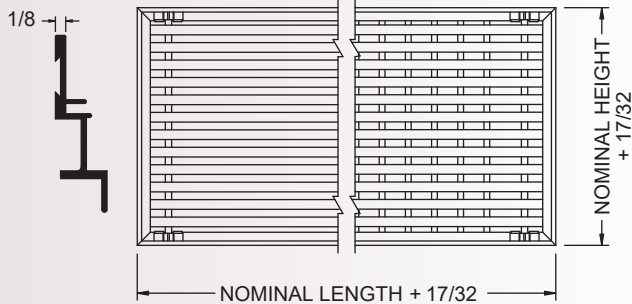
## 6, 7, 9 BORDER



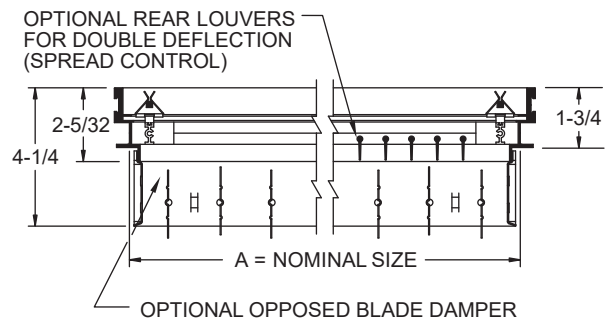
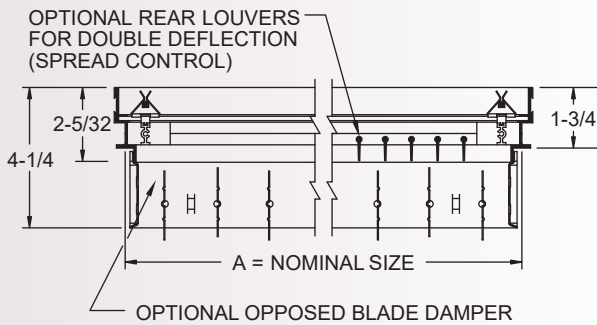
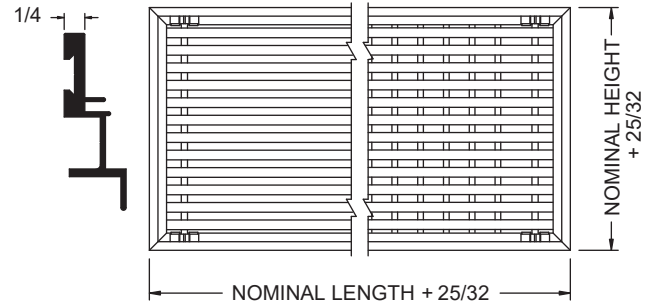
BORDER STYLE	X	A
NO. 6	1-1/4"	1-13/16"
NO. 7	5/8"	9/16"
NO. 9	1"	1-5/16"



### FG BORDER FLOOR REINFORCED



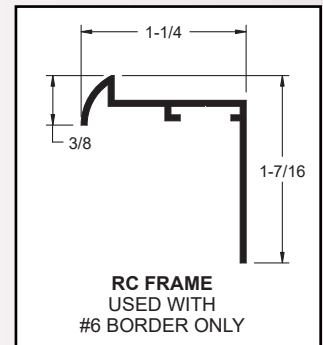
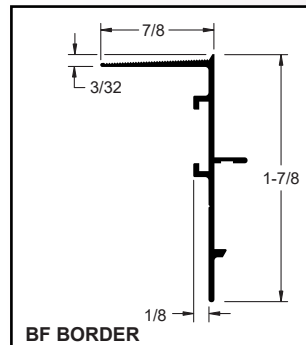
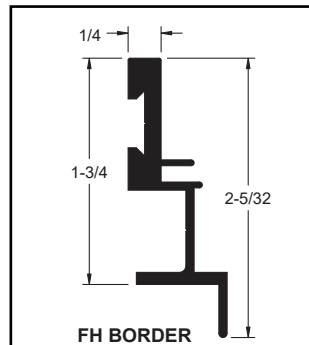
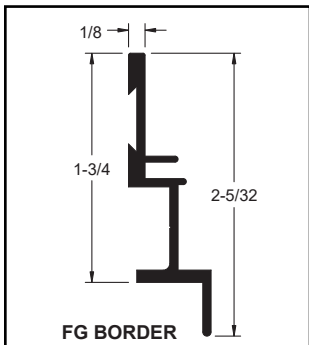
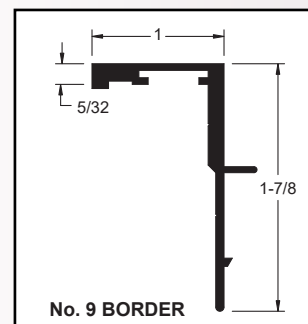
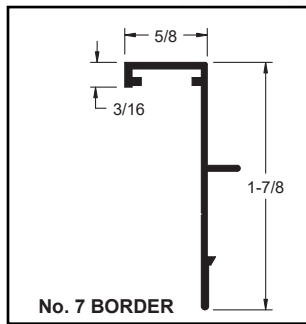
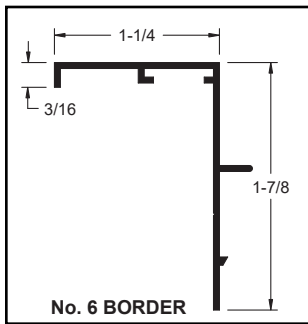
### FH BORDER FLOOR REINFORCED



CORE ONLY

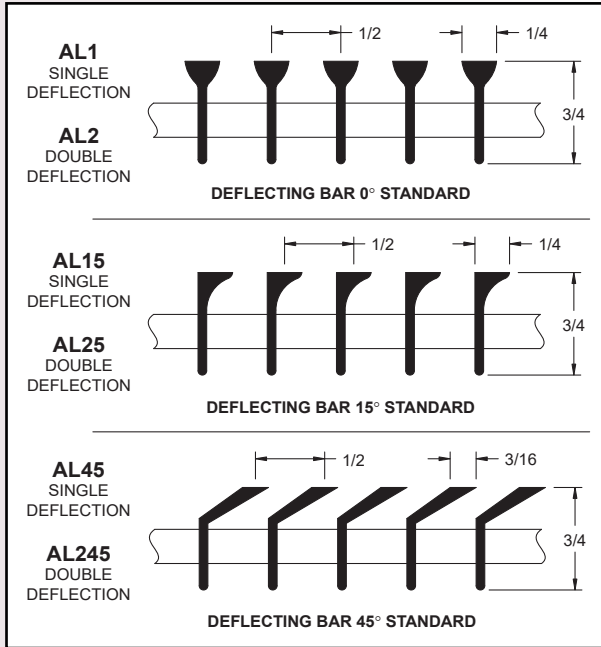


BORDER AND FRAME STYLES

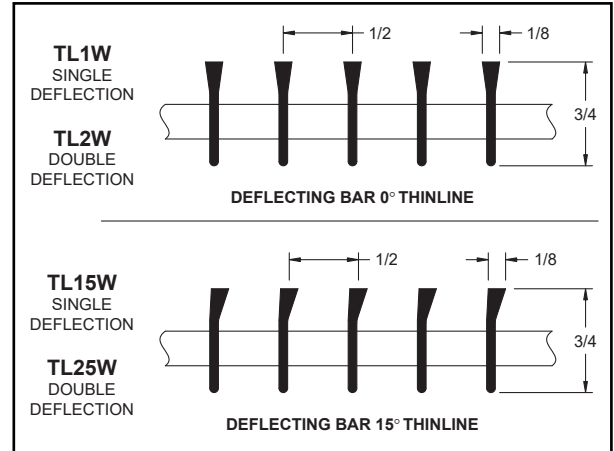


Border 9 with optional floor reinforcing is recommended for high traffic areas where a flanged frame is required.

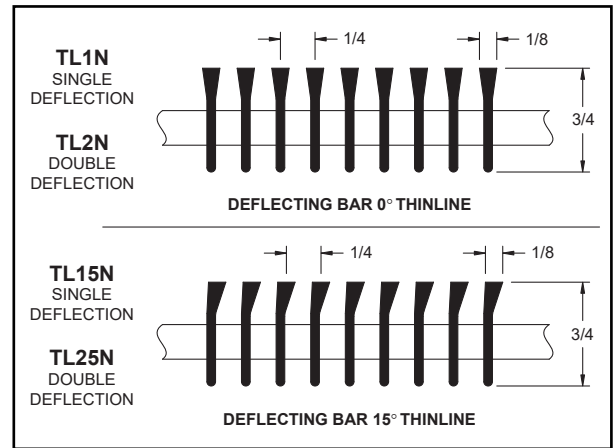
1/4" WIDE BARS ON 1/2" CENTERS



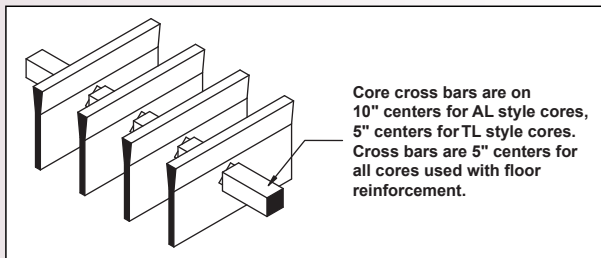
1/8" WIDE BARS ON 1/2" CENTERS



1/8" WIDE BARS ON 1/4" CENTERS



TYPICAL CORE ASSEMBLY

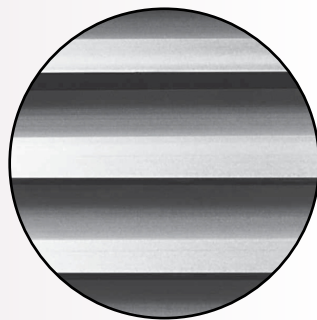


CORE FACE VIEWS (APPROXIMATELY FULL SCALE)

AL1, AL15



AL45

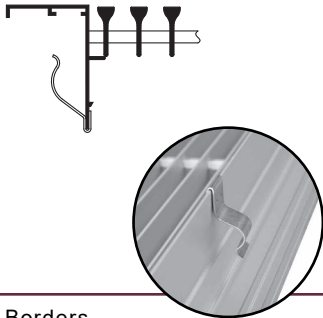
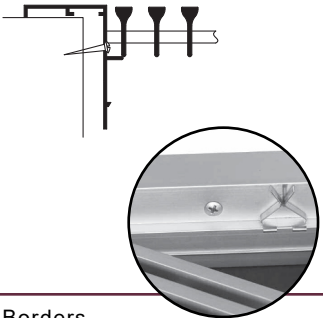
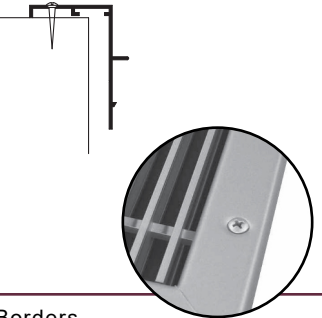
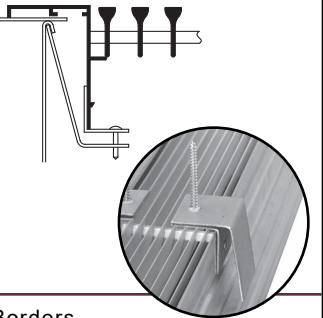


TL1W, TL15W

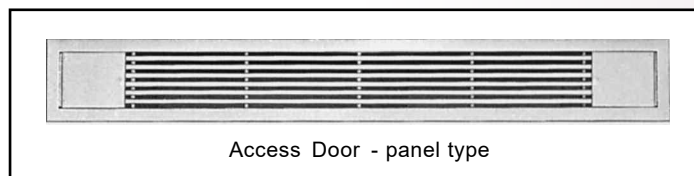
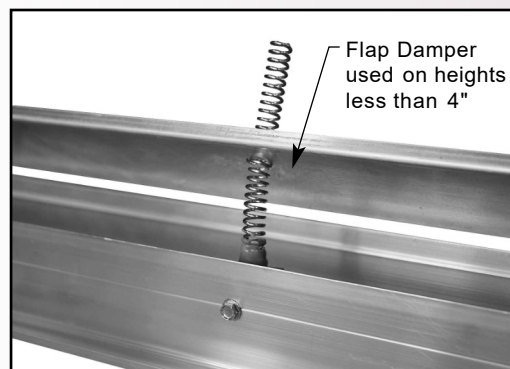
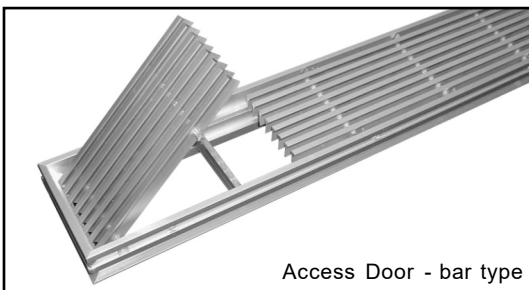
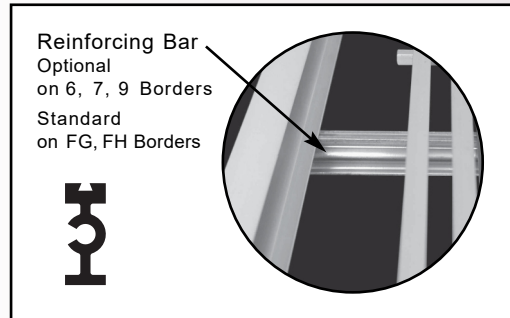
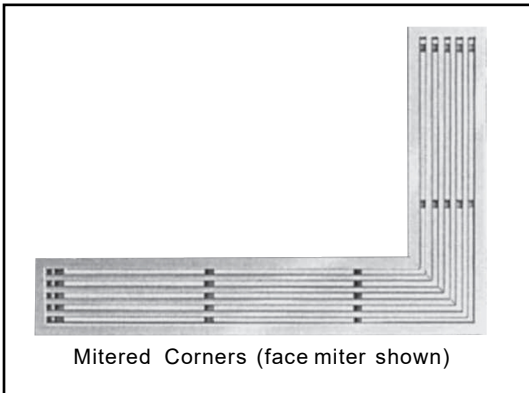


TL1N, TL15N



MOUNTING "A" SPRING CLIPS	MOUNTING "B" SCREWS THRU STACK	MOUNTING "C" SCREW HOLES IN FACE	MOUNTING "D" CONCEALED MOUNTING
			
<p>Borders 6 — 7 — 9 For Sill Applications</p> <p>Opposed Blade Damper Minimum O.B. Damper Height = 4"</p>	<p>Borders 6 — 7 — 9 — FG — FH For Sidewall, Sill or Floor</p> <p>Size Limitations Minimum Grille Height = 3" Maximum Grille Height = 18" (cores welded to frame over 18")</p> <p>Opposed Blade Damper Min. O.B. Damper Height = 4"</p>	<p>Borders 6 For Sidewall, Sill or Floor</p> <p>Opposed Blade Damper Minimum O.B. Damper Height = 4"</p>	<p>Borders 6 — 7 — 9 For Sidewall, Sill or Floor</p> <p>Size Limitations Minimum Grille Height = 3" Maximum Grille Height = 16"</p> <p>Opposed Blade Damper Duct Mounted O.B. Damper Minimum height = 4"</p>

## accessories



**APPLICATION**

- Wall applications requiring shallow grille to eliminate special framing requirement or notching of studs
- Recommended for heating, cooling, or general ventilation applications
- Supply or return air systems

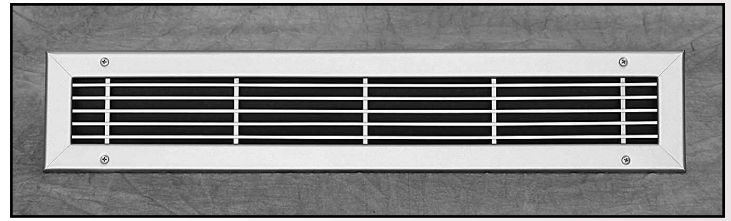
**PRODUCT FEATURES**

- Grille extends less than 5/8" into wall – continuous runs in sheet rock without special consideration for framing or stud interference
- Cores available with 1/8" or 1/4" bars on 1/4" or 1/2" centers - 0°, 15°, or 45° deflection
- Duct heights from 2" to 18"
- Heavy gauge, extruded aluminum core construction
- Core is arc welded to border – non-removable.
- Borders countersunk for provided screws (mounting type C)
- Arctic White baked-on finish
- Lengths to 116" in one piece, or continuous runs using alignment strips.

**GRILL OPTIONS**

- Core Only
- Concealed Mounting Option D
- Optional paint colors or custom color matching

PERFORMANCE DATA - Pages E-8 – E-11



Model TL-S

