## LMAZ/MAB/MASB

# Strong-Tie

## **Mudsill Anchors**

Mudsill anchors provide an alternative to anchor bolts. They easily mount on forms and make finishing easier. The unique design provides installation flexibility, eliminating problems with misplaced anchor bolts. Suitable for stemwall or slab foundations, mudsill anchors are one piece so there are no more nuts and washers to lose.

LMAZ — anchors mudsill to poured walls or slab foundations

MAB — anchors mudsill to concrete block, poured walls or slab foundations

MASB — anchors mudsill to concrete block

Material: LMAZ, MAB - 18 gauge; MASB - 16 gauge

**Finish:** MAB, MASB — galvanized (also available in ZMAX® coating); LMAZ — ZMAX only.

#### Installation:

• Use all specified fasteners; see General Notes.

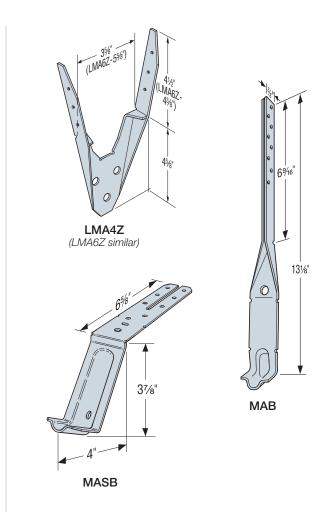
#### LMAZ/MAB:

- CMU shall have a minimum f'<sub>m</sub> = 1,500 psi and concrete shall have a minimum f'<sub>c</sub> = 2,500 psi.
- Not for use where a horizontal cold joint exists between the slab and foundation wall or footing beneath, unless provisions are made to transfer the load.
- Not for use in slabs poured over foundation walls formed of concrete block or with brick and 4" masonry block stemwalls.

### MASB

- Fill CMU cell with concrete grout first, then place MASB into the grouted cell and adjust into position. Attach mudsill to anchor only after the concrete grout cures.
- CMU shall have a minimum  $f'_m = 1,500 \text{ psi}$ .
- The MASB mudsill anchors were tested in standard 8" CMU.

Codes: See p. 13 for Code Reference Key Chart



These products are available with additional corrosion protection. For more information, see p. 16.

	Model No.	Sill Size	Fasteners (in.)		DF/SP Allowable Loads (160)			Code
			Sides	Тор	Uplift	Parallel to Plate (F <sub>1</sub> )	Perp. to Plate (F <sub>2</sub> )	Ref.
	MASB (Standard)	2x4, 2x6	(2) 0.148 x 1½	(6) 0.148 x 1½	160	860	550	IBC®
	MASB (One Leg Up)	2x4, 2x6	(5) 0.148 x 1½	(3) 0.148 x 1½	_	860	360	
	LMA4Z	2x4	(2) 0.148 x 1½	(4) 0.148 x 1½	905	675	555	
		3x4	(4) 0.148 x 1½	(2) 0.148 x 1½	905	675	555	
	LMA6Z	2x6	(2) 0.148 x 1½	(4) 0.148 x 1½	905	825	675	_
		3x6	(4) 0.148 x 1½	(4) 0.148 x 1½	1,110	825	675	
	MAB15	2x4, 2x6	(2) 0.148 x 1½	(4) 0.148 x 1½	565	670	500	IBC
		2x8, 2x10, 2x12	(2) 0.148 x 1½	(4) 0.148 x 1½	_	500	500	

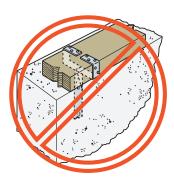
- 1. Loads have been increased for wind or earthquake loading, with no further increase allowed. Reduce where other loads govern.
- 2. For uplift loads, provide attachment from mudsill to building's structural components to prevent cross-grain bending.
- 3. LMAZ installed attached to the stud has no load reduction for parallel and perpendicular loads and an uplift of 600 lb. for LMA4 and 835 lb. for LMA6.
- 4. For concrete stem wall applications, allowable loads are based on a minimum concrete stem wall width of 6".
- 5. **Fasteners:** Nail dimensions are listed diameter by length. See pp. 23–24 for fastener information.

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## Prescriptive Anchor Spacing

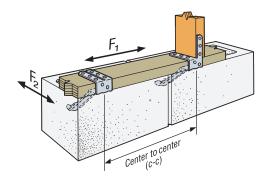
Model No.	0.C. Spacing to Replace ½" Anchor Bolt 6' 0.C. (160)	0.C. Spacing to Replace %" Anchor Bolt 6' 0.C. (160)	Minimum Concrete End Distance	Minimum C–C Spacing	
MASB	5'-0"	3'-5"	3¾"	7½"	
LMA4Z	3'-8"	2'-7"	45%"	91/4"	
LMA6Z	4'-6"	3'-2"	478		
MAB15	3'-10"	2'-8"	6½"	13"	

- "Prescriptive" denotes designs per the IRC® or conventional provisions of the IBC® for wind speeds 140 mph or less, or for Seismic Design Category D and less (SDC E and less in IBC).
- 2. Spacing is based on parallel-to-plate load direction only.
- 3. Place anchors not more than 12" from the end of sill and splices per code.
- 4. Concrete shall have a minimum compressive strength of  $f'_{C} = 2,500$  psi.
- 5. Grout-filled CMU (GFCMU) shall have a minimum compressive strength of f'm = 1,500 psi.
- 6. Spacings apply to DF, SP, and HF sill plates.
- 7. For concrete stemwall applications, the minimum concrete stemwall width is 6".

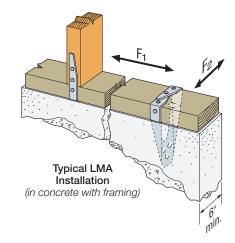


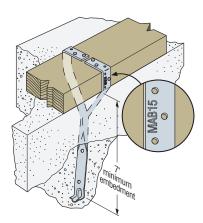
MAB Misinstallation
(MAB straps must be

separated before the concrete is poured or installed through 3/4"-diameter hole)



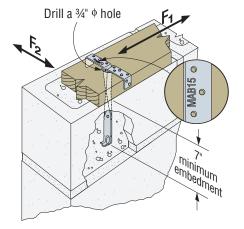
Typical MASB Installation





Typical MAB15 Installation in Concrete Not applicable for

Not applicable for concrete-block installation.



Typical MAB15 Installation in Concrete Block

Concrete installation similar.