

See page 19 for additional product illustrations. The LMA offers a higher lateral load capacity in a lighter gauge. Two sizes provide an economical replacement for 1/2" diameter sill plate bolts. The MASB is designed for installation on concrete masonry units.

**MAS**—For slab or concrete stemwall construction. Fast for the finisher—install before pouring concrete by nailing into form, or insert into concrete after pour. Finish up to the edge of slab. No anchor bolts to hand trowel around, no nuts or washers to lose. Fast for the framer—eliminates plate drilling and mislocated anchor bolts.

**MAB**—Anchors mudsill to concrete block, poured walls or slab foundation.

**MATERIAL:** MASB, MAS, MA—16 gauge; LMA, MAB—18 gauge

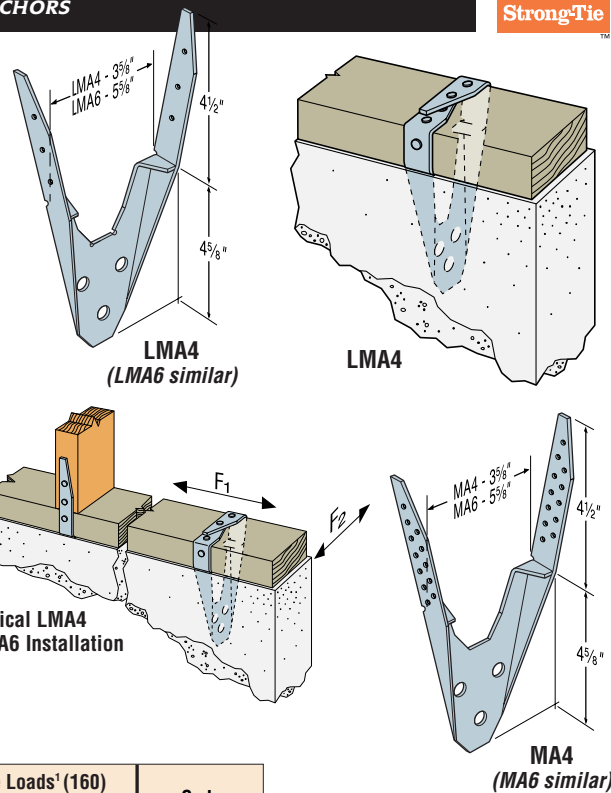
**FINISH:** Galvanized. Some products available in Z-MAX. See Corrosion Information, page 5.

**INSTALLATION:** • Use all specified fasteners. See General Notes.

- Not for use where (a) a horizontal cold joint exists between the slab and foundation wall or footing beneath, unless provisions are made to transfer the load, or (b) anchors are installed in slabs poured over foundation walls formed of concrete block. All grout and concrete must have a minimum  $f'_c$  2000 psi.
- **MASB**—First fill CMU cell with concrete grout. Place MASB into the grouted cell, and adjust into position. Attach mudsill to anchor after the concrete cures.
- **MAB**—When used in monolithic slab or concrete stemwall construction, prior to installation, spread the MAB legs to accommodate mudsill. Immediately after pouring and screeding, insert into the concrete or grout. Attach the mudsill to the anchor with 10dx1 1/2" nails after the concrete cures. When installed in grouted concrete block or solid pour for a center hole installation, drill a 3/4" hole through the mudsill and install straps through the hole. Wrap MAB straps around the mudsill and install 10dx1 1/2" nails.
- MASB and MAB tested in standard 8" CMU.

**CODES:** See page 10 for Code Listing Key Chart.

Available with additional corrosion protection. Check with factory.



Model No.	Sill Size	Fasteners		Uplift Avg Ult	Allowable Loads <sup>1</sup> (133)			Allowable Loads <sup>1</sup> (160)			Code Ref.
		Sides Total	Top		Uplift <sup>2</sup>	Parallel to Plate (F <sub>1</sub> )	Perp to Plate (F <sub>2</sub> )	Uplift <sup>2</sup>	Parallel to Plate (F <sub>1</sub> )	Perp to Plate (F <sub>2</sub> )	
MAS	2x4,6	2-10dx1 1/2	4-10dx1 1/2	3360	1005	720	480	1005	815	575	1, 28, 121
	3x4,6	4-10dx1 1/2	2-10dx1 1/2	3117	955	720	465	955	835	465	170
MASB	2x4,6,8	2-10dx1 1/2	6-10dx1 1/2	—	130	930	410	130	930	410	33, 62, 70, 122
LMA4	2x4	2-10dx1 1/2	4-10dx1 1/2	2831	905	675	520	905	675	520	160
	3x4	4-10dx1 1/2	2-10dx1 1/2	2831	905	675	520	905	675	520	
LMA6	2x6	2-10dx1 1/2	4-10dx1 1/2	2831	905	730	650	905	825	650	160
	3x6	4-10dx1 1/2	4-10dx1 1/2	3697	1110	825	650	1110	825	650	
MA4	2x4	2-10dx1 1/2	2-10dx1 1/2	3065	830	480	430	830	575	430	7, 90, 121
	3x4	4-10dx1 1/2	2-10dx1 1/2	2977	915	680	430	915	680	430	
MA6	2x6	2-10dx1 1/2	4-10dx1 1/2	2977	915	680	430	915	680	430	7, 90, 121
	3x6	4-10dx1 1/2	4-10dx1 1/2	3083	915	680	430	915	680	430	
MAB15	2x4,6	2-10dx1 1/2	4-10dx1 1/2	1867	565	500	500	565	500	500	2, 40, 121
MAB23	2x4,6	2-10dx1 1/2	4-10dx1 1/2	1867	565	500	500	565	500	500	2, 40, 121

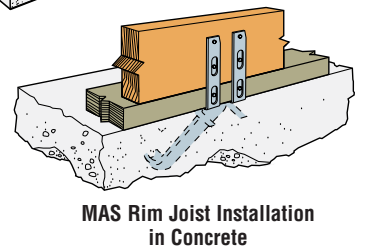
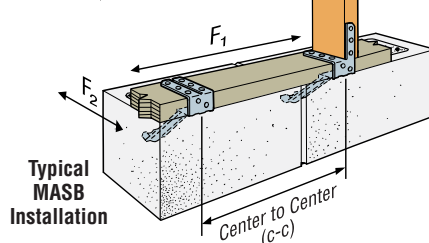
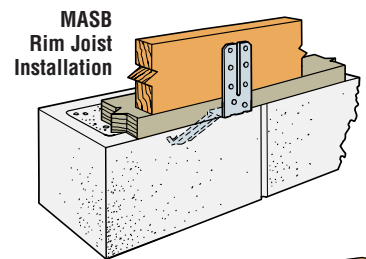
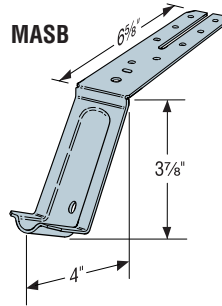
1. Loads have been increased for short-term loading.
2. For uplift loads, provide attachment from mudsill to building's structural components to prevent cross-grain bending.
3. MAS installed with 1 leg attached to stud has loads of 435 lbs (uplift), 700 lbs (parallel to plate) and 240 lbs (perpendicular to plate).
4. MASB installed with 1 leg attached to stud has load of 960 lbs (parallel to plate) and 360 lbs (perpendicular to plate).
5. MA installed attached to the stud has a perpendicular load of 670 lbs. Parallel loads as listed. For reduced uplift loads, contact Simpson.
6. LMA installed attached to the stud has no load reduction for parallel and perpendicular loads. For reduced uplift contact Simpson.

## Anchor Spacing

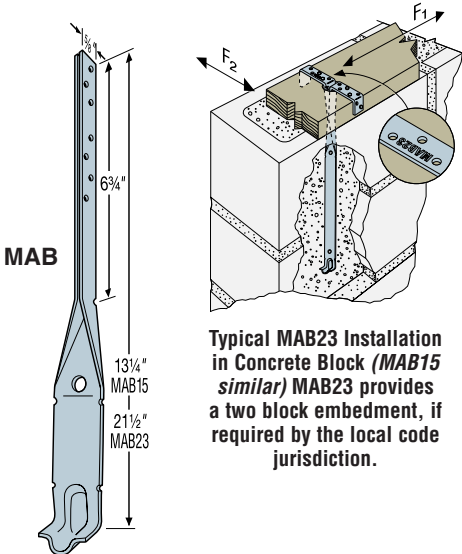
Available with additional corrosion protection. Check with factory.

Model No.	O.C. Spacing to replace 1/2" Anchor Bolt 6' O.C.		Min. Concrete End Distance	Min. C-C Spacing
	(133)	(160)		
LMA4	5'	4'	3 1/2"	3'
LMA6	5 1/2'	5'	3 1/2"	3 1/2'
MA4	3 1/2'	3 1/2'	2 1/2"	2 1/2'
MA6	5'	4'	3 1/2"	3'
MAB15	3 1/2'	3'	2 1/2"	2'
MAB23	3 1/2'	3'	2 1/2"	2'
MAS	5'	5'	3 1/2"	3 1/2'
MASB <sup>2,3</sup>	6'	6'	4' 10"	4' 10"

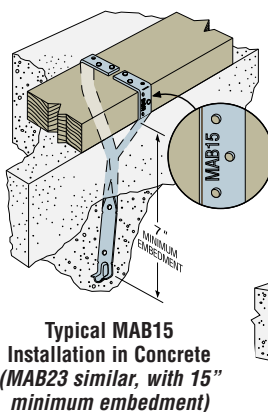
1. Place anchors not more than 1' from the end of each sill per code.
2. Spacing is based on parallel to plate load direction only.
3. All grout and concrete min.  $f'_c$  2000 psi.



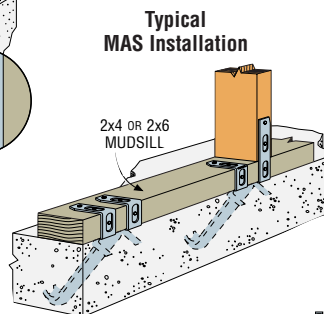
MAS Rim Joist Installation in Concrete



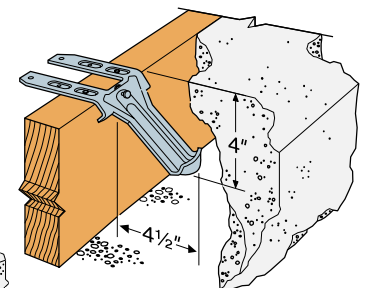
Typical MAB23 Installation in Concrete Block (MAB15 similar) MAB23 provides a two block embedment, if required by the local code jurisdiction.



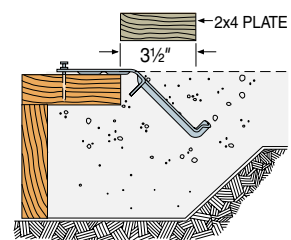
Typical MAB15 Installation in Concrete (MAB23 similar, with 15" minimum embedment)



Typical MAS Installation



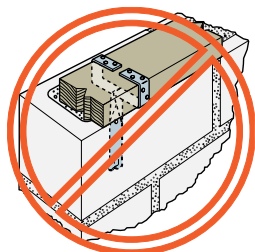
Typical MAS Installation



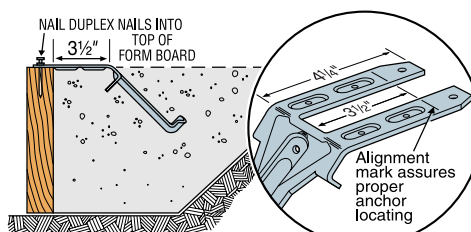
Alternate MAS Installation for Brick Ledges

## ALTERNATE INSTALLATION

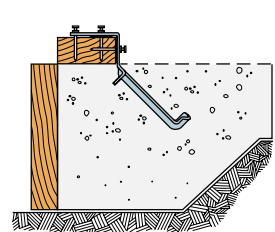
Step 1: Attach MAS 3 1/2" from inside of form. After concrete cures, remove nails and bend straps up 90°.



MAB Misinstallation (MAB straps must be separated before the concrete is poured)



1



2

Step 2: Place mudsill on concrete and nail MAS over mudsill.