

**PA** Purlin Anchors

Wood-to-concrete and -concrete block connectors. The PA's dual embedment line allows installation in concrete or concrete block.

**MATERIAL:** PA—12 gauge

**FINISH:** Galvanized. Some products available HDG or ZMAX® coating.

**INSTALLATION:** • Minimum concrete strength is 15 MPa.

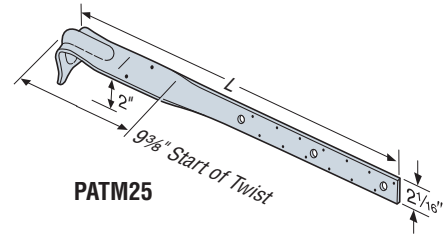
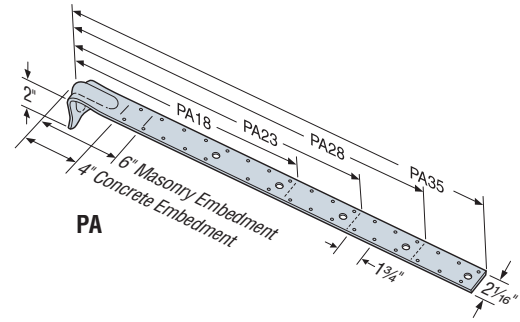
- Use all specified fasteners; some models have extra fastener holes. See General Notes.
- Purlin Anchor must hook around rebar.
- Wood splitting may occur when anchor is nailed to wood less than 3½" wide. For widths less than 3½", see PAI.

**EDGE DISTANCE**—Minimum concrete edge distance is 5". Minimum concrete block left-to-right edge distance is 20".

**CONCRETE BLOCK WALL**—The masonry embedment line on the PA allows for 4" of grout embedment in a standard 8" concrete masonry unit. The minimum wall specifications are:

- A** One 15M vertical rebar, 32" long, 16" each side of anchor;
- B** Two courses of grout filled block above and below the anchor (no cold joints allowed);
- C** A horizontal bond beam with two 15M rebars, 40" long, a maximum of two courses above or below the anchor.

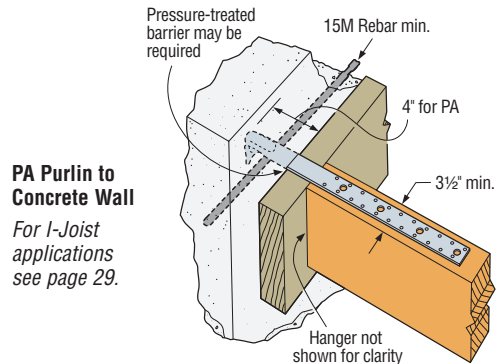
All cells grouted with 2000 psi ¾" aggregate grout. Grout shall be vibrated per the Code. Rebar quantities, sizes and lengths are minimum requirements and may be increased per any additional wall design requirements.



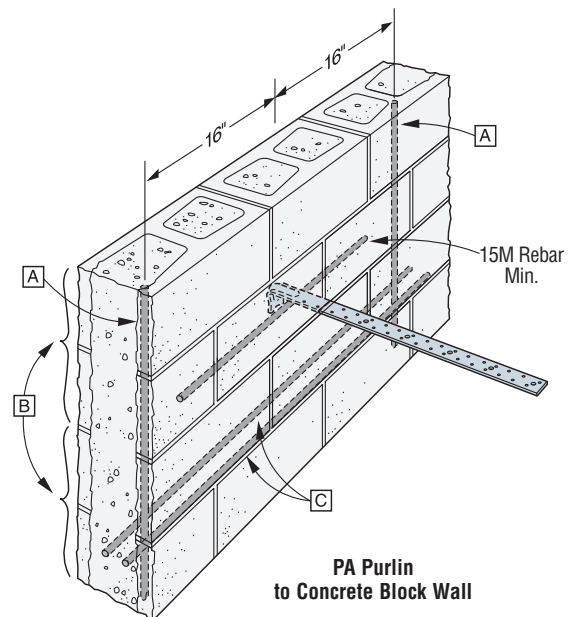
These products are available with additional corrosion protection. Additional products on this page may also be available with this option, check with Simpson Strong-Tie for details.

Model No.	L (in)	Fasteners		Factored Tensile Resistance (K <sub>D</sub> =1.15)			
		Masonry	Concrete	D.Fir-L		S-P-F	
				Masonry lbs	Concrete lbs	Masonry lbs	Concrete lbs
<b>Maximum Capacity</b>							
PA18	18½	10-16d	12-16d	2410	2890	2080	2495
PA23	23¾	16-16d	18-16d	3855	4340	3330	3745
PA28	29	18-16d	20-16d	3870	4360	3745	4160
PA35	35	18-16d	20-16d	3870	4360	3745	4160
PATM25	28¾	13-16d	—	—	3135	—	2705
<b>1½ LVL and 3x Ledger</b>							
PA18	18½	10-16d	12-16d	2410	2890	2080	2495
PA23	23¾	15-16d	18-16d	3615	4340	3120	3745
PA28	29	15-16d	20-16d	3615	4360	3120	4160
PA35	35	15-16d	20-16d	3615	4360	3120	4160
PATM25	28¾	13-16d	—	—	3135	—	2705
<b>4x Ledger</b>							
PA18	18½	8-16d	11-16d	1930	2650	1665	2290
PA23	23¾	15-16d	17-16d	3615	4095	3120	3535
PA28	29	15-16d	20-16d	3615	4360	3120	4160
PA35	35	15-16d	20-16d	3615	4360	3120	4160
PATM25	28¾	13-16d	—	—	3135	—	2705

1. 10d commons may be substituted for the specified 16d commons at 0.82 of the tabulated resistances.
2. Factored resistances have been increased 15% for earthquake or wind loading with no further increase allowed; reduce where other load durations govern.
3. The PATM is designed to be installed at a 2° angle. Less load will be developed at steeper angles.
4. PATM25 installed with 3½" ASTM A307 bolts has a factored resistance of 3820 lbs (17.02 kN) for D.Fir-L and S-P-F (K<sub>D</sub>=1.15) assuming a minimum lumber thickness of 2½".
5. **NAILS:** 16d = 0.162" dia. x 3½" long. See page 16-17 for other nail sizes and information.



**PA Purlin to Concrete Wall**  
For I-Joist applications see page 29.



**PA Purlin to Concrete Block Wall**