

NAILBASE NO. 4005

SUBJECT: FASTENING TO CONCRETE OR MASONRY WALLS

DATE: APRIL 2010 (REVISED JANUARY 2019)

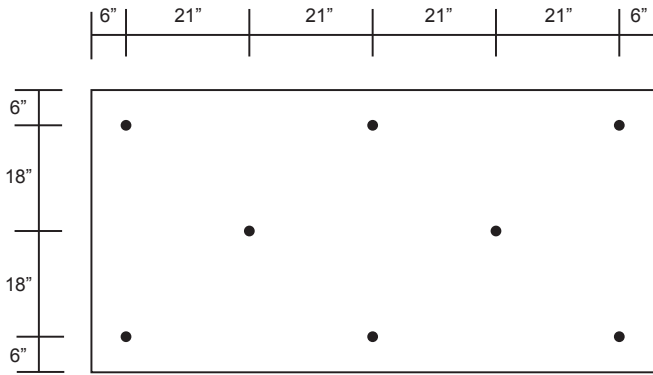
Minimum fastening requirements for R-Shield® Nailbase attached to concrete or masonry walls with 1/4" (4.8mm) diameter Titen® screws have been developed. Various numbers of fasteners per 4' x 8' R-Shield Nailbase panel provide for a range of allowable loads that R-Shield Nailbase could support when installed flush over a concrete or masonry wall. Examples of uniformly distributed loads that R-Shield Nailbase could support include gypsum board or other interior finish materials. Non uniform loads from cabinets, interior fixtures, or plant equipment are not covered in the table and shall be supported using additional fasteners attached to the concrete or CMU wall.

R-Shield Nailbase Walls - Uniformly Distributed Loading (attached with 1/4" (4.8mm) diameter Titen Screws¹⁻⁶)	
Number of Fasteners⁵	Allowable Load, psf (kPa)
	Concrete or Masonry
8	3 (0.14)
12	14 (0.67)
16	30 (1.44)
24	85 (4.07)
32	160 (7.66)

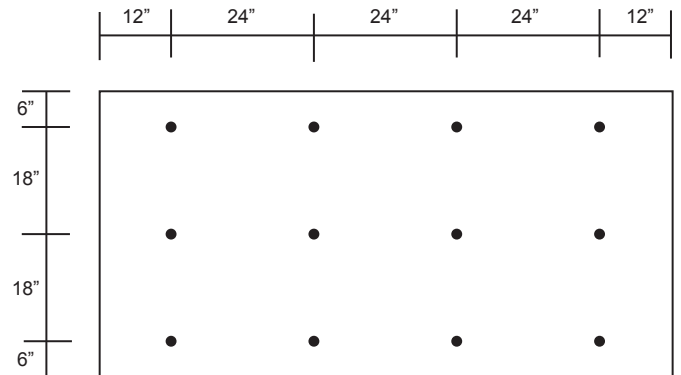
1. Applicable to 4' x 8' R-Shield Nailbase up to 5" thick.
2. Minimum anchor embedment is 1" (25.4 mm) and maximum anchor embedment is 1-1/2" (38.1 mm).
3. Concrete must be minimum depth of 1.5 x embedment.
4. Critical edge distance is 1-1/2" (38.1 mm) to edge of concrete or masonry block.
5. Table does not consider positive or negative pressures (such as wind). In cases where this is a design consideration, the use of washers is recommended.
6. Please refer to page 2 of this bulletin for fastening patterns.

Titen® is a registered trademark of Simpson Strong-Tie Anchor Systems.

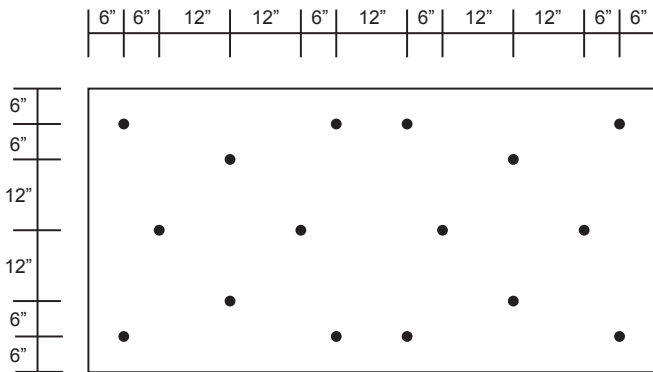
FASTENING PATTERNS FOR 4' X 8' NAILBASE



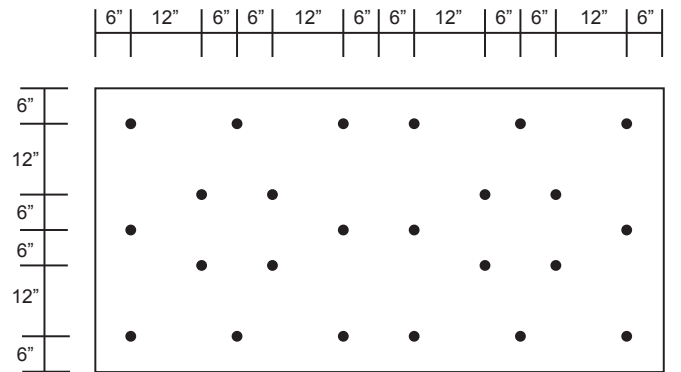
8 FASTENERS/BD.



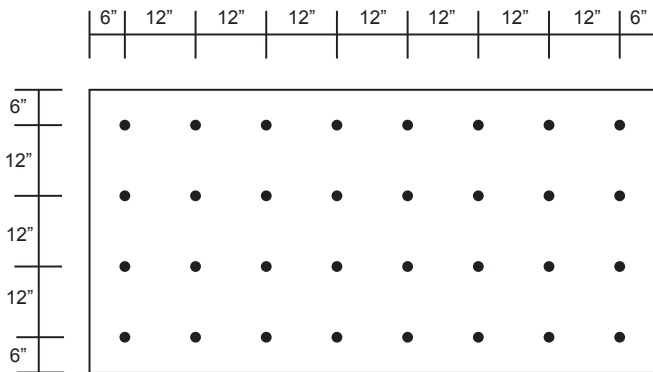
12 FASTENERS/BD.



16 FASTENERS/BD.



24 FASTENERS/BD.



32 FASTENERS/BD.