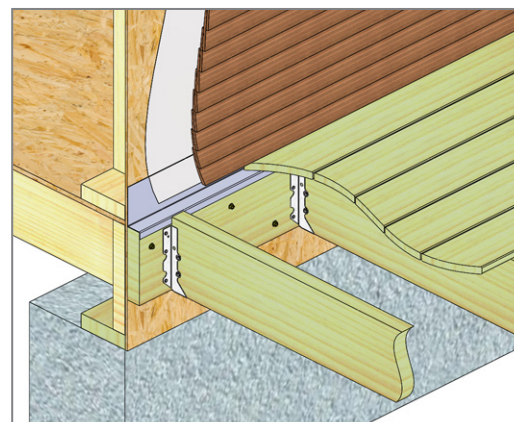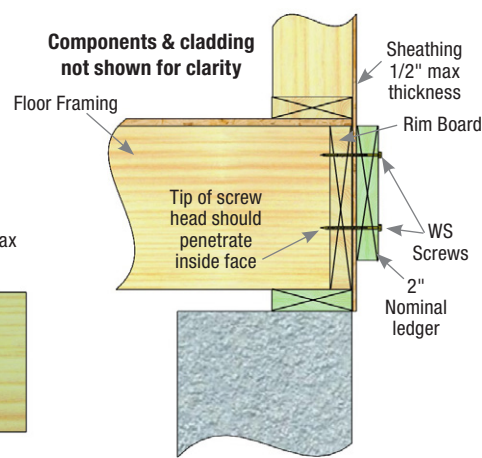# Attaching Deck Ledger to Rim Board

The MiTek USP WS series wood screws can be used to fasten deck ledgers to the rim board (AKA band / rim joist) of structures in residential constructions. The most common lengths for the deck ledger application are the WS35-EXT and the WS5-EXT which are 3.5" and 5" long, respectively. Order WS screws with the "-EXT" suffix to ensure you are receiving screws with the Exterior Coat Finish.

Installation:

• Select the proper WS-EXT screw length. The threads should have full engagement with the rim board and the tip of the screw should be protruding and visible beyond the inside face of the rim board member.

• With appropriate screw length selected, drive the screw through the ledger, sheathing, and rim board joist with a high torque variable speed drill.

• Drive screw so head is firm and flush with surface of deck ledger, but do not overdrive.

• Repeat these steps and install the appropriate number of screws at the prescribed edge, end distances, and spacing as called out in Table 1 and Figure 1.
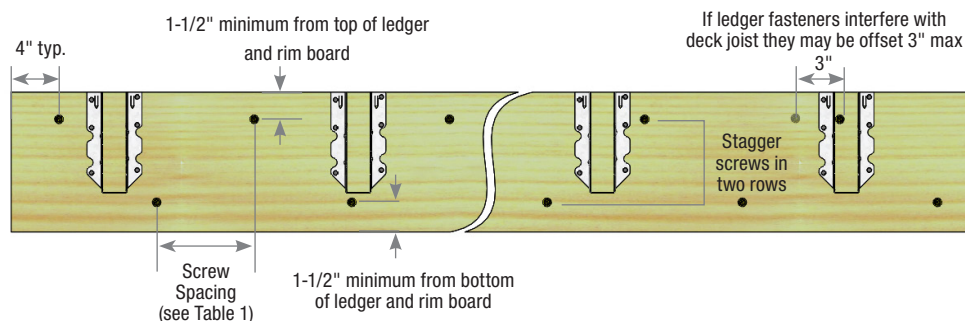

Attaching ledger to rim board

Figure 1

Section View

Table 1

Live Load	Ledger	Rim Board	Spacing between WS-EXT Screws based on Joist Span (in)						
			≤ 6-ft	≤ 8-ft	≤ 10-ft	≤ 12-ft	≤ 14-ft	≤ 16-ft	≤ 18-ft
40 psf	2x Solid Sawn	2x Solid Sawn	21	16	12	10	9	8	7
		1" Min EWP	23	17	14	11	10	8	7
60 psf	2x Solid Sawn	2x Solid Sawn	15	11	9	7	6	5	5
		1" Min EWP	16	12	10	8	7	6	5

1) Screw spacing based on Deck Dead Load = 10 psf.
2) Screw spacing based on WS35-EXT or WS5-EXT screws. WS6-EXT screws may be used with no adjustment to the spacing depicted.
3) Multiple ledger plies should be fastened together to act as one unit independent of the WS ledger attachment screws.
4) Solid sawn ledger and rim board shall be Spruce-Pine-Fir (S-P-F) or other wood species with a specific gravity of 0.42 or greater .
5) EWP rim board shall be minimum 1" thick with a minimum specific gravity of 0.50.

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