

SUBJECT: NAIL WITHDRAWAL VALUES OF OSB

With the use of Premier SIPS, the attachment of finishing materials such as roof shingles, siding, drywall, etc., is required. The application of these materials is typically accomplished with conventional nail products. An independent code recognized testing agency conducted withdrawal tests following ASTM D1037 procedures to provide data on the direct withdrawal resistance of nail fasteners when driven into the 7/16" OSB face of SIP. The following is a summary of the average ultimate values achieved for various nail fasteners.

AVERAGE DIRECT WITHDRAWAL (PULLOUT) – LBS.

Nail Size & Description	Avg. Ultimate Pullout
4d ring shank-drywall nail	133
6d smooth galvanized	59
Roofing Nail-smooth galvanized	51
8d smooth coated sinker	150
8d smooth galvanized spiral shank	112
8d galvanized ring shank	77
8d smooth galvanized	65
8d bright box	107
10d galvanized ring shank	164
16d smooth galvanized	63
16d bright box	90

These values are ultimate values. Appropriate safety factors should be applied to obtain design values.

This data has been compiled to provide manufacturers, designers and engineers with values for the assessment of fastener requirements.