OSB Orientation

OSB (oriented strand board) is an engineered wood product formed by layering strands of thin, rectangular wooden strips in specific orientations. The layers are built up with the external layers aligned in the panel’s strength axis and with internal layers cross-oriented.

While OSB does not have a continuous grain like a natural wood, it does have a specific axis of strength. This can be determined by observing that the majority of the visible surface wood chips will be parallel to the direction of strength. The most accurate method for determining the axis of strength is to examine the ink stamps placed on the wood by the manufacturer.

PorterSIPS can be used in either direction, but the allowable loads will be different depending on the orientation. A 4’x8’ PorterSIP is manufactured with the OSB axis of strength parallel to the 8’ length. A “jumbo” SIP has the strength axis in the 24’ direction. Any wall panel over 8’ tall is automatically oriented in the strong direction. Please use the load charts in the PorterSIP NTA code listing report and note that there are values listed for panels used in the weak axis.

Direction of strength of either 4x8 or jumbo