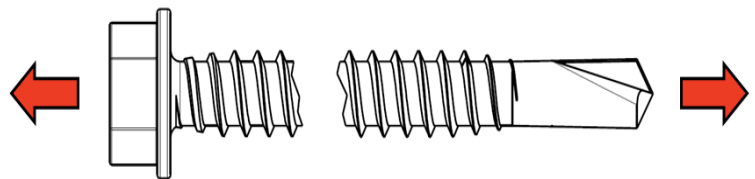


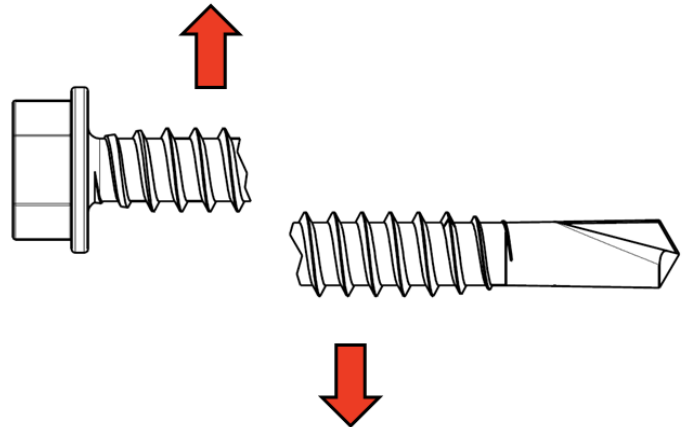
Ultimate Tensile Strength

The point at which the fastener fails under a load exerted in two opposite directions. This load tends to pull the fastener apart.



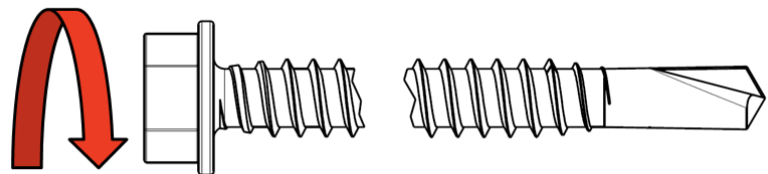
Ultimate Shear Strength

The point at which a fastener fails under a load exerted in offset, opposing directions. This load is typically applied upon the shank of the fastener.



Ultimate Torsional Strength

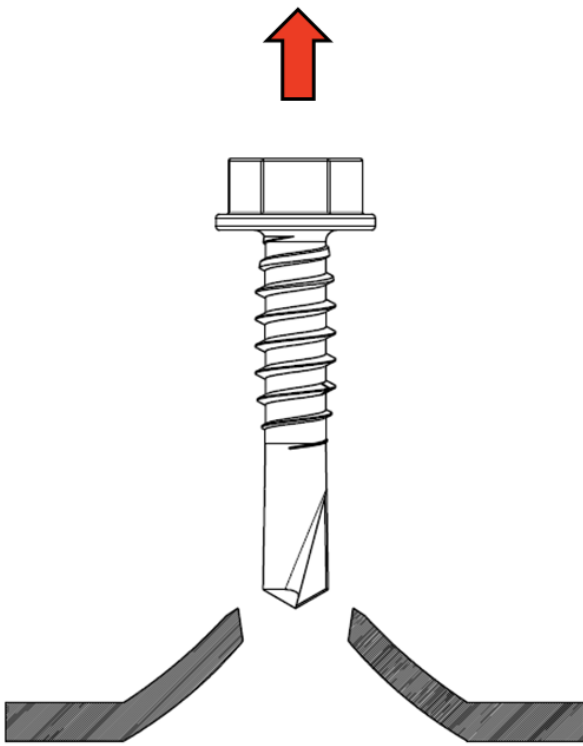
The point at which a fastener fails under a twisting load exerted on the head of the fastener. This load typically is applied during the installation process.



Pull Out Strength

The maximum tensile load at which a fastener's threaded connection remains intact in the application substrate.

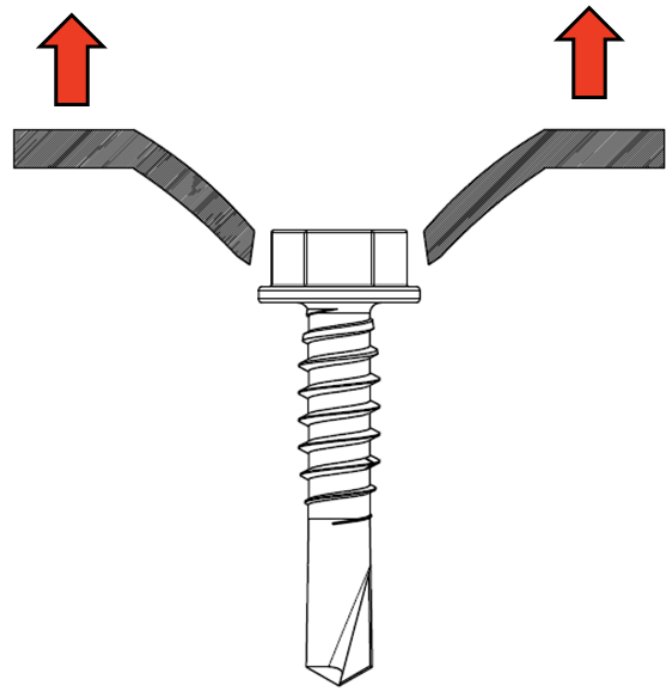
This value is typically related to the thickness of the application substrate and fastener characteristics including thread pitch and major diameter.



Pull Over Strength

The maximum load at which a fastener can resist the pulling of the fastened sheet material over the head of the fastener. This load is typically a result of gravity, wind, or other environmental factors.

This value is typically related to the strength and diameter of the washer utilized and the strength and thickness of the metal panel in the application.



Please Note:

All values for tensile, shear, and torsional strength are listed in the individual product Spec Sheets provided on the SFS North America Website.

Not all SFS products have pull out and pull over performance values available. See individual product Spec Sheets provided on the SFS North America Website for available values.