

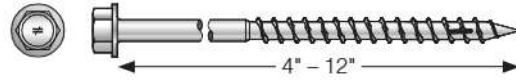
## Structural and General Fastening

### Strong-Drive® SDWH TIMBER-HEX SS Screw

Structural Wood-to-Wood Connections Including Ledgers, Indoor/Outdoor Projects, Applications Requiring High to Severe Corrosion Resistance

Type 316 stainless steel provides severe corrosion resistance, making it suitable for exterior and preservative-treated wood applications.

For more information, see p. 62, C-F-2023 Fastening Systems catalog



SDWH Timber Hex SS Screw — Allowable Shear Loads —  
Douglas Fir–Larch, Southern Pine, Spruce–Pine–Fir, Hem–Fir

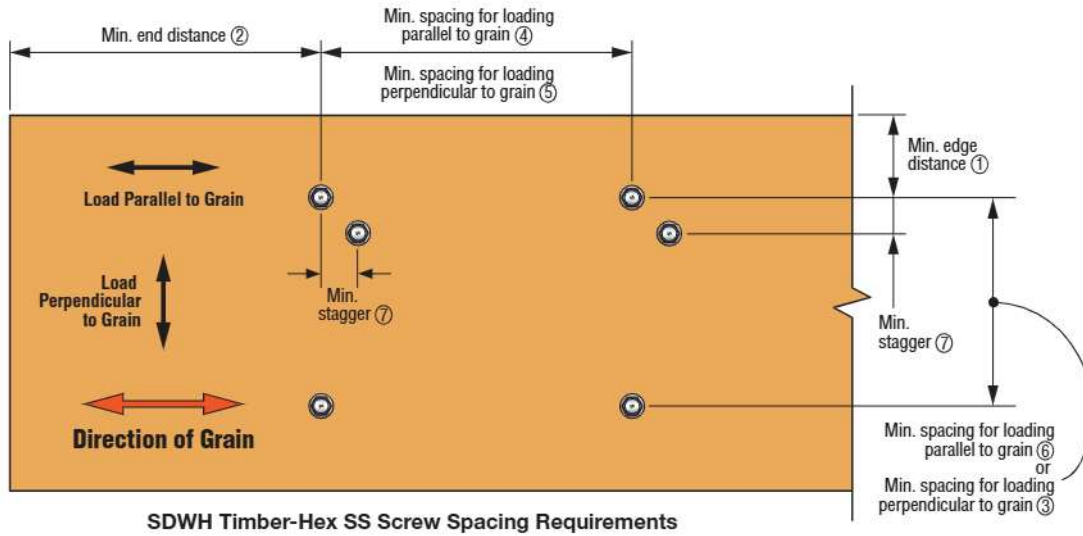
Length (in.)	Model No.	Thread Length (in.)	Head Diameter (in.)	Reference Allowable Shear Loads (lb.)		
				Wood Side Member Thickness (in.)		
				1½	3	3½
4	SDWH19400SS	2.40	0.46	177	—	—
4½	SDWH19450SS	2.75	0.46	177	177	—
5	SDWH19500SS	2.40	0.46	177	177	177
6	SDWH19600SS	2.40	0.46	177	177	177
8	SDWH19800SS	2.40	0.46	177	177	177
4	SDWH27400SS	3.00	0.65	235	—	—
5	SDWH27500SS	3.00	0.65	235	235	235
6	SDWH27600SS	3.00	0.65	235	235	235
8	SDWH27800SS	3.00	0.65	235	235	235
10	SDWH271000SS	3.00	0.65	235	235	235
12	SDWH271200SS	3.00	0.65	235	235	235

**Note:** See p. 65 for spacing requirements.

- All applications are based on full penetration into the main member. Full penetration is the screw length minus the side member thickness.
- Allowable loads are shown at the load duration factor of  $C_D = 1.0$ . Loads may be increased for load duration per the building code up to a  $C_D = 1.6$ . Tabulated values must be multiplied by all applicable adjustment factors per the NDS.
- Table values based on testing in SPF lumber.
- Design values include NDS wet service factor; no adjustment required for in-service moisture content greater than 19%.
- Allowable loads are perpendicular or parallel to grain.
- Installs best with 18V high-torque cordless or ½" low speed drill. If splitting occurs predrill with ⅜" drill bit for SDWH19 screws and ⅜" drill bit for SDWH27 screws.
- Allowable withdrawal load for the SDWH19 screw for DFL/SP is 155 lb./in. and for SPF/HF is 108 lb./in. Allowable load is based on inches of thread penetration into the main member.
- Allowable withdrawal load for the SDWH27 screw for DFL/SP is 260 lb./in. and for SPF/HF is 160 lb./in. Allowable load is based on inches of thread penetration into the main member.
- For LRFV values, the reference connection design values shall be adjusted in accordance with NDS-18, section 11.3.

# Structural and General Fastening

## Strong-Drive® SDWH TIMBER-HEX SS Screw (cont.)



### SDWH Timber-Hex SS Screw Spacing Requirements

Condition	Direction of Load to Grain	ID	Minimum Distance or Spacing (in.)
Edge Distance	Perpendicular	①	1 7/16
	Parallel	①	1 7/16
End Distance	Perpendicular	②	3
	Parallel	②	3
Spacing Between Fasteners in a Row	Perpendicular	③	3
	Parallel	④	3
Spacing Between Rows of Fasteners	Perpendicular	⑤	3
	Parallel	⑥	3
Spacing Between Staggered Rows	Perpendicular or Parallel	⑦	1 1/2

1. For SDWH19 screws subject to axial loading only, use the following minimum dimensions: end distance: = 2 3/8", edge distance = 1", spacing parallel to grain = 1 5/8", spacing perpendicular to grain = 1".
2. For SDWH27 screws subject to axial loading only, use the following minimum dimensions: end distance = 3 1/4", edge distance = 1 3/8", spacing parallel to grain = 2 3/8", spacing perpendicular to grain = 1 5/8".