



Tough Enough For The
Most Demanding Jobs

Strong-Drive

SDWH TIMBER-HEX HDG Screw

Structural Wood-to-Wood Connections

(800) 999-5099
www.strongtie.com

Product Information



Great for all types of coastal projects

The Strong-Drive® line of structural screws now includes a .276" diameter hot-dip galvanized screw suitable for heavy-duty marine and coastal applications. The SDWH TIMBER-HEX HDG screw has a SawTooth™ point and oversized integral washer that makes for fast installations; no predrilling or separate washer needed. Speed up your next pile job by replacing 3/4" and 5/8" HDG bolt/washer/nut assemblies (2 screws for 1 bolt in many conditions) with the new Strong-Drive® SDWH TIMBER-HEX HDG screw.

ASTM A153 Class-C hot-dip galvanized coating suitable for coastal and marine environments

Burly .276" shank diameter for heavy-duty structural applications

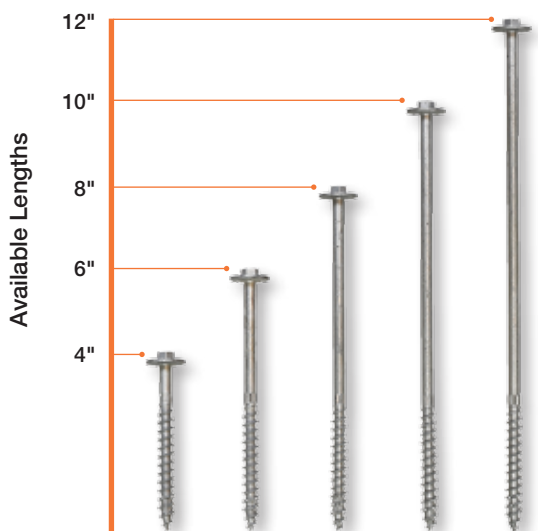


SawTooth™ point design for fast starts and no predrilling



3/8" hex drive for secure driving

Oversized .930" diameter integral washer eliminates the need for a separate washer



Premium ball-lock hex driver bit included

INSTALL TIP

- For best results, use a minimum of 1/2" low-speed corded drill to install

Product Information



Premium ball-lock hex driver bit holds the screw, allowing for easy placement

Save Time and Money

with the lowest installed cost pile-fastening solution on the market

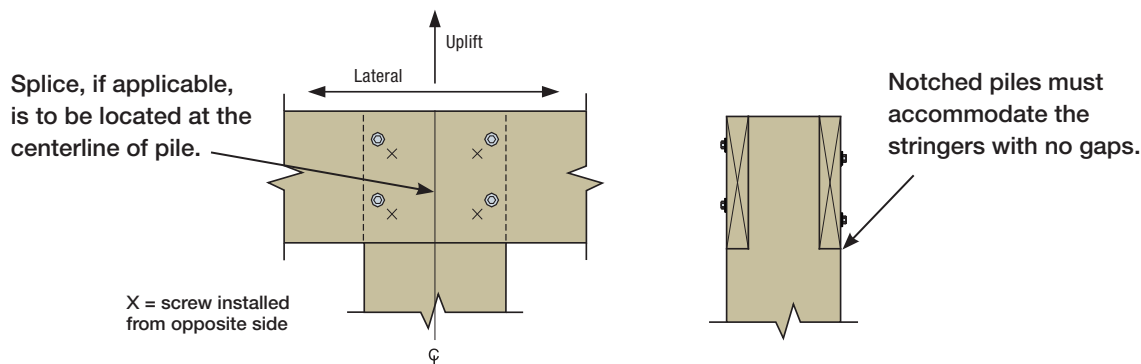
- Install fastener from one side
- No predrilling necessary
- Drives fast, saving you time
- No need to purchase separate washers, nuts, and bolts
- No expensive auger drill bits

Common Applications:

- Structural pilings
- Piers
- Docks
- Boardwalks
- Anywhere you need a tough exterior structural fastener



Square Piling

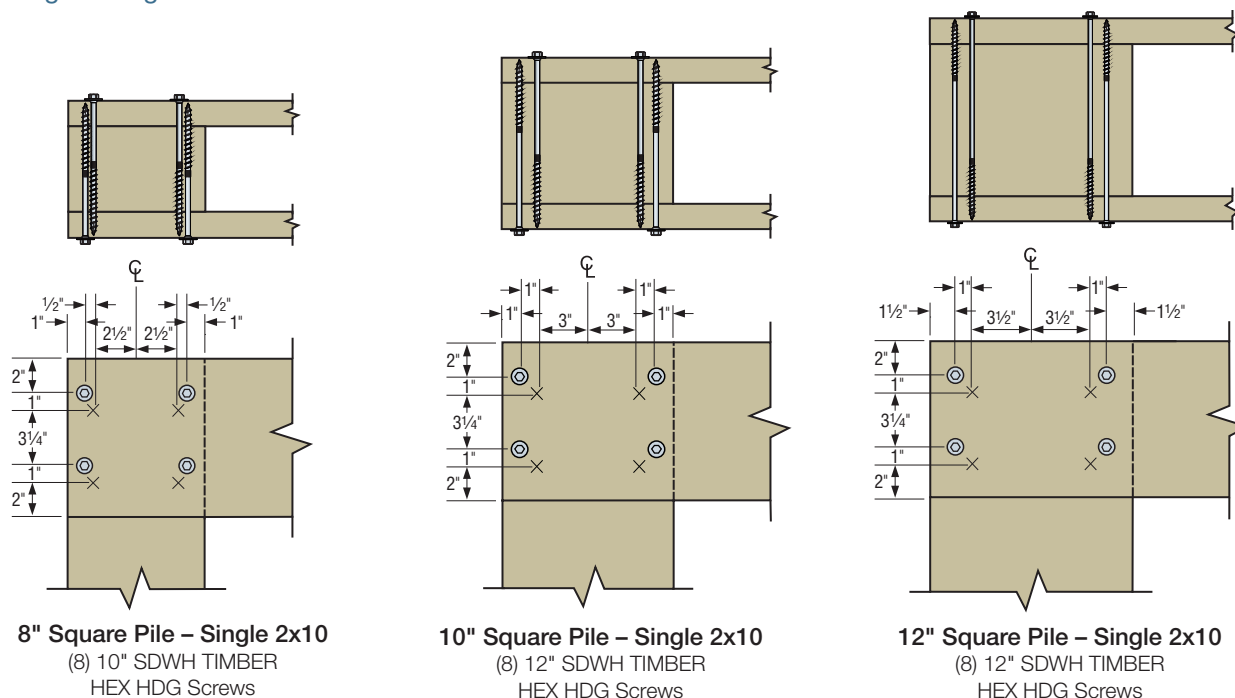


Stringer-to-Square Pile Connection Loads

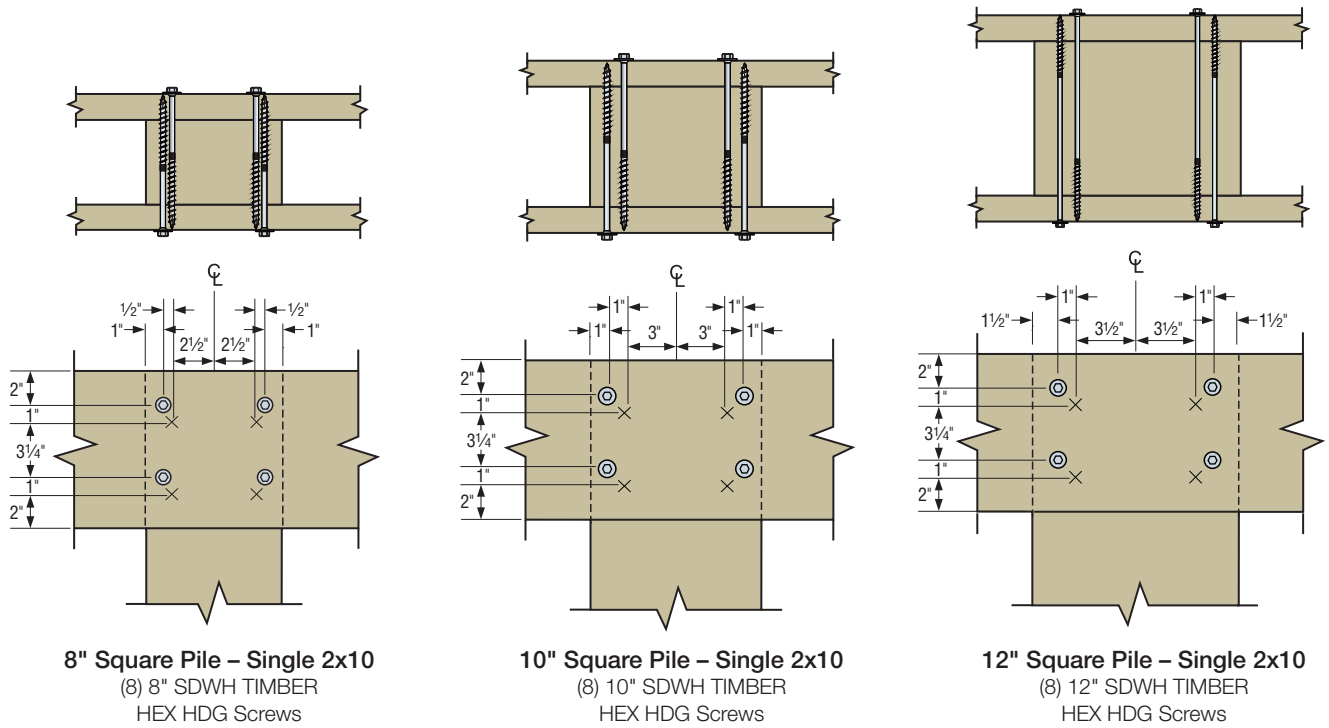
Square Pile Size (inches)	Stringer Size	Total No. Stringers	Screw Length (inches)	Screw Model No.	No. Screws (Each Side)	Allowable Connection Loads (lbs.)					
						Uplift			Lateral		
						Continuous	Spliced	End	Continuous	Spliced	End
8	2 x 10	2	8	SDWH27800G	4	3455	2370	2085	4035	3750	3380
10	2 x 10	2	10	SDWH271000G	4	4405	3290	2380	4705	4290	4125
12	2 x 10	2	12	SDWH271200G	4	4140	3480	2490	5095	5095	4205
10	2 x 10	4	10	SDWH271000G	4	5100	4160	3095	5870	4900	3685
12	2 x 10	4	12	SDWH271200G	4	7840	5530	4600	7090	6025	5160
12	2 x 12	4	12	SDWH271200G	6	9705	5920	5275	8305	8305	7640

- All tabulated values are based on double shear action with the same size and quantity of stringers on each side of the pile.
- Dimensions and allowable connection loads are based on notched piles that must accommodate the stringers with adequate bearing and no gaps. Notched piles shall not be notched such that more than 50% of the cross section is removed. Unnotched piles may be used providing the width and area of wood between the stringers and the fastener placement geometry is unchanged from the notched conditions.
- Allowable loads are shown at the wood 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.
- For in-service moisture content greater than 19%, use $C_M = 0.68$.
- For conditions with stringers on one side only, use the longest screw length that does not extend beyond the opposite surface of the pile. Use one quarter of the loads shown for that length screw and stringer condition.
- Wood piles are SP. Wood stringers may be sawn lumber, glulam, or SCL with minimum SG = 0.55 (or equivalent). For stringer widths at least 1.5" and less than 3.0" thick, use the table values for the conditions with a single 2x stringer on each side of the pile.
- When the screws are simultaneously loaded in more than one direction, the allowable load must be evaluated using the unity equation: $(\text{Design Uplift}/\text{Allowable Uplift}) + (\text{Design Lateral}/\text{Allowable Lateral}) \leq 1.0$.

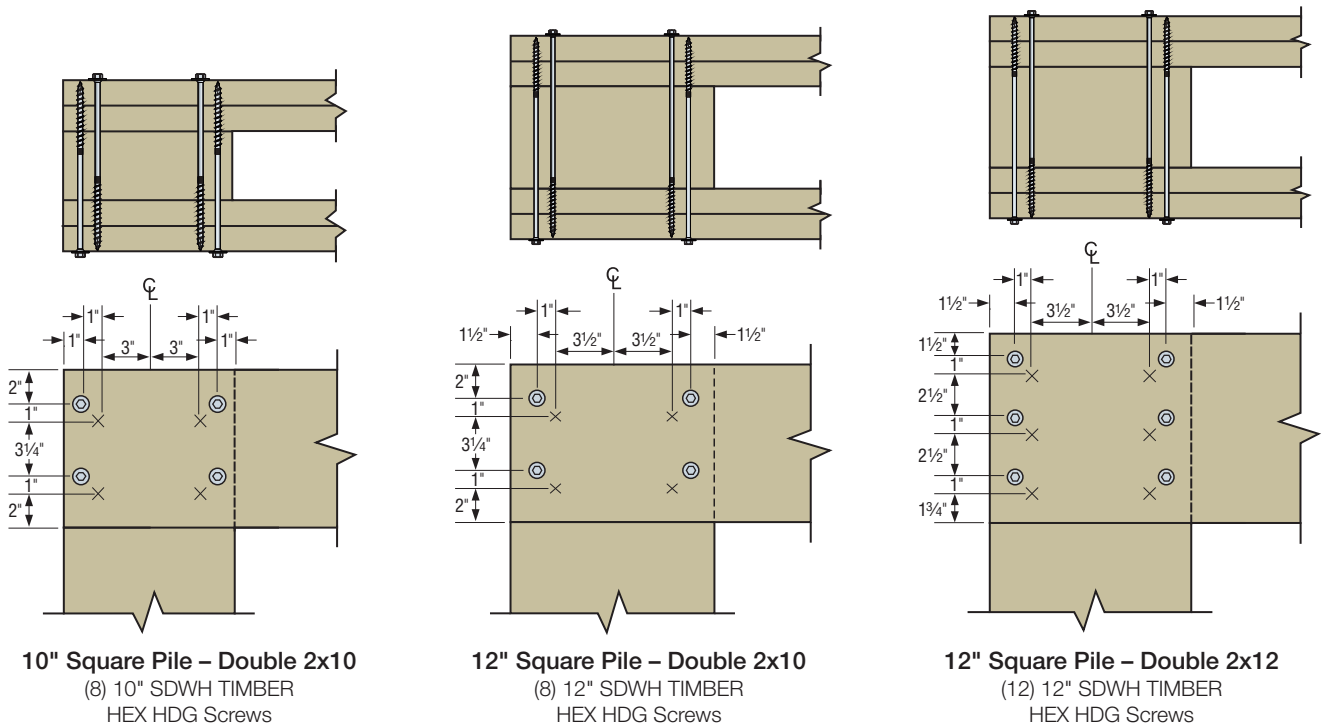
Single Stringer – End Condition



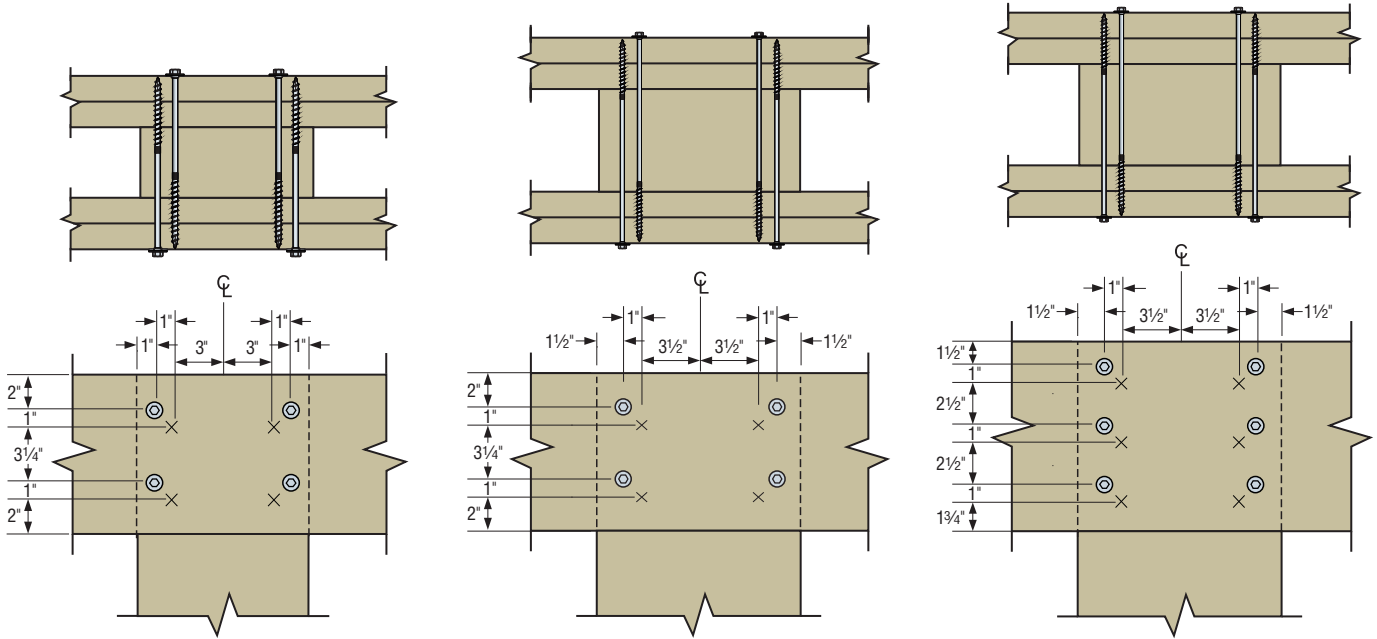
Square Piling – Single Stringer – Continuous Condition



Double Stringer – End Condition



Square Piling – Double Stringer – Continuous Condition

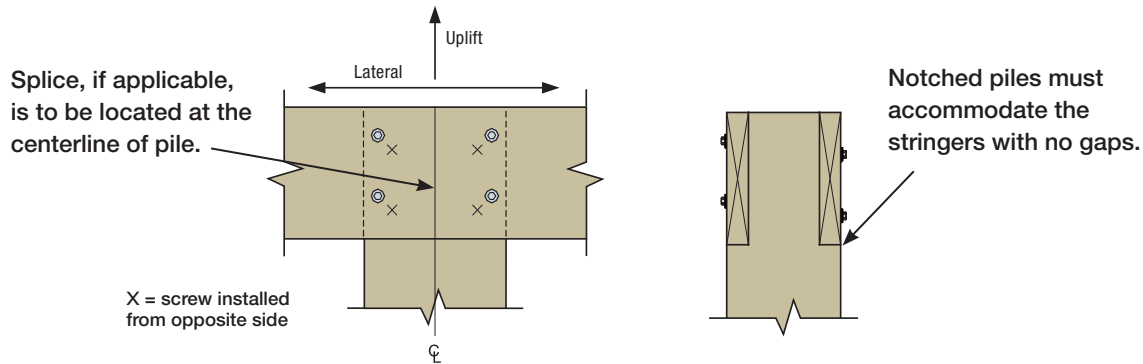


10" Square Pile – Double 2x10
(8) 10" SDWH TIMBER
HEX HDG Screws

12" Square Pile – Double 2x10
(8) 12" SDWH TIMBER
HEX HDG Screws

12" Square Pile – Double 2x12
(12) 12" SDWH TIMBER
HEX HDG Screws

Round Piling

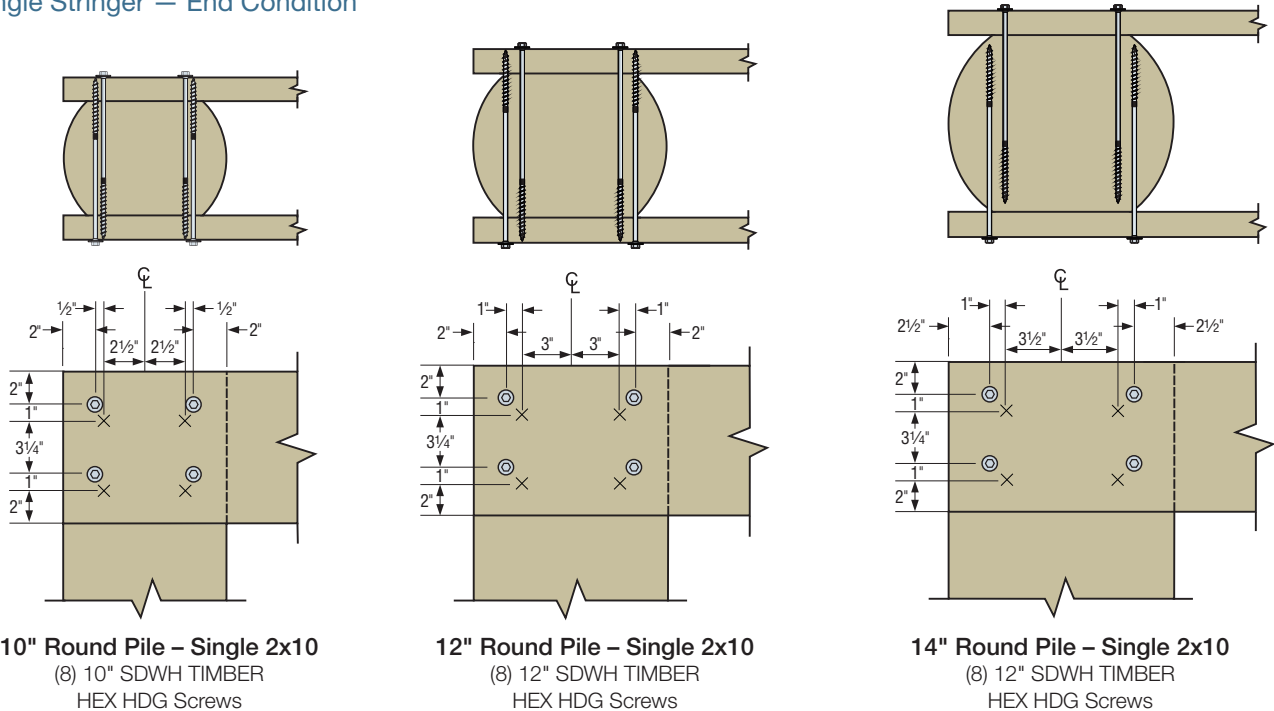


Stringer-to-Round Pile Connection Loads

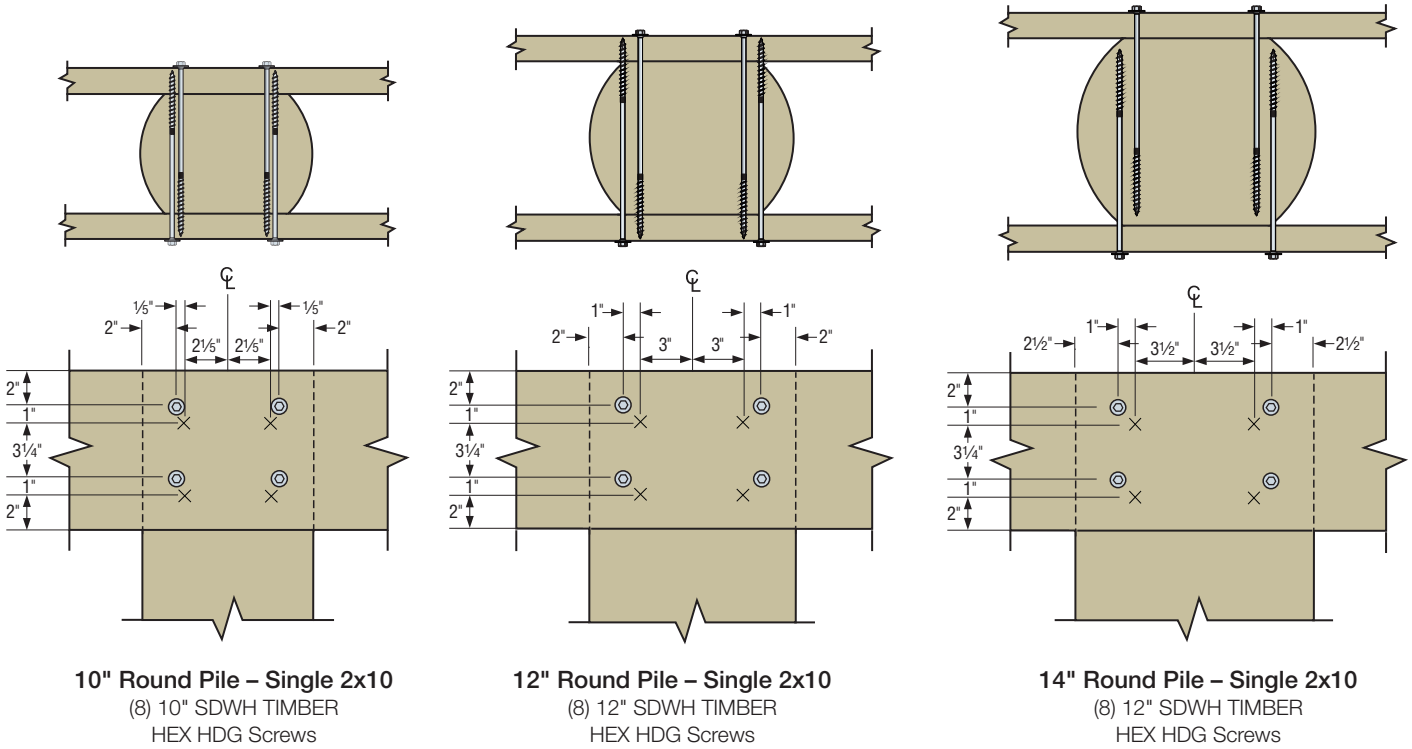
Round Pile Diameter (inches)	Stringer Size	Total No. Stringers	Screw Length (inches)	Screw Model No.	No. Screws (Each Side)	Allowable Connection Loads (lbs.)					
						Uplift			Lateral		
						Continuous	Spliced	End	Continuous	Spliced	End
10	2 x 10	2	10	SDWH271000G	4	3965	2960	2140	3430	3190	2875
12	2 x 10	2	12	SDWH271200G	4	3725	3130	2240	4000	3645	3505
14	2 x 10	2	12	SDWH271200G	4	1865	1565	1120	2000	1825	1755
10	2 x 10	4	10	SDWH271000G	4	4590	3745	2785	3430	3190	2875
12	2 x 10	4	12	SDWH271200G	4	7055	4975	4140	4990	4165	3130
12	2 x 12	4	12	SDWH271200G	6	8735	5330	4750	6000	5470	5260
14	2x10	4	12	SDWH271200G	4	3530	2490	2070	2495	2085	1565
14	2x12	4	12	SDWH271200G	6	4370	2665	2375	3000	2735	2630

- All tabulated values are based on double shear action with the same size and quantity of stringers on each side of the pile.
- Dimensions and allowable connection loads are based on notched piles that must accommodate the stringers with adequate bearing and no gaps. Notched piles shall not be notched such that more than 50% of the cross section is removed. Unnotched piles may be used providing the width and area of wood between the stringers and the fastener placement geometry is unchanged from the notched conditions.
- Allowable loads are shown at the wood 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.
- For in-service moisture content greater than 19%, use $C_M = 0.68$.
- For conditions with stringers on one side only, use the longest screw length that does not extend beyond the opposite surface of the pile. Use one quarter of the loads shown for that length screw and stringer condition.
- Wood piles are SP. Wood stringers may be sawn lumber, glulam, or SCL with minimum SG = 0.55 (or equivalent). For stringer widths at least 1.5" and less than 3.0" thick, use the table values for the conditions with a single 2x stringer on each side of the pile.
- For 14" diameter piles, use the same screw pattern as for the 12" piles. Loads for 14" diameter piles are based on single shear action.
- When the screws are simultaneously loaded in more than one direction, the allowable load must be evaluated using the unity equation:
(Design Uplift/Allowable Uplift) + (Design Lateral/Allowable Lateral) ≤ 1.0 .

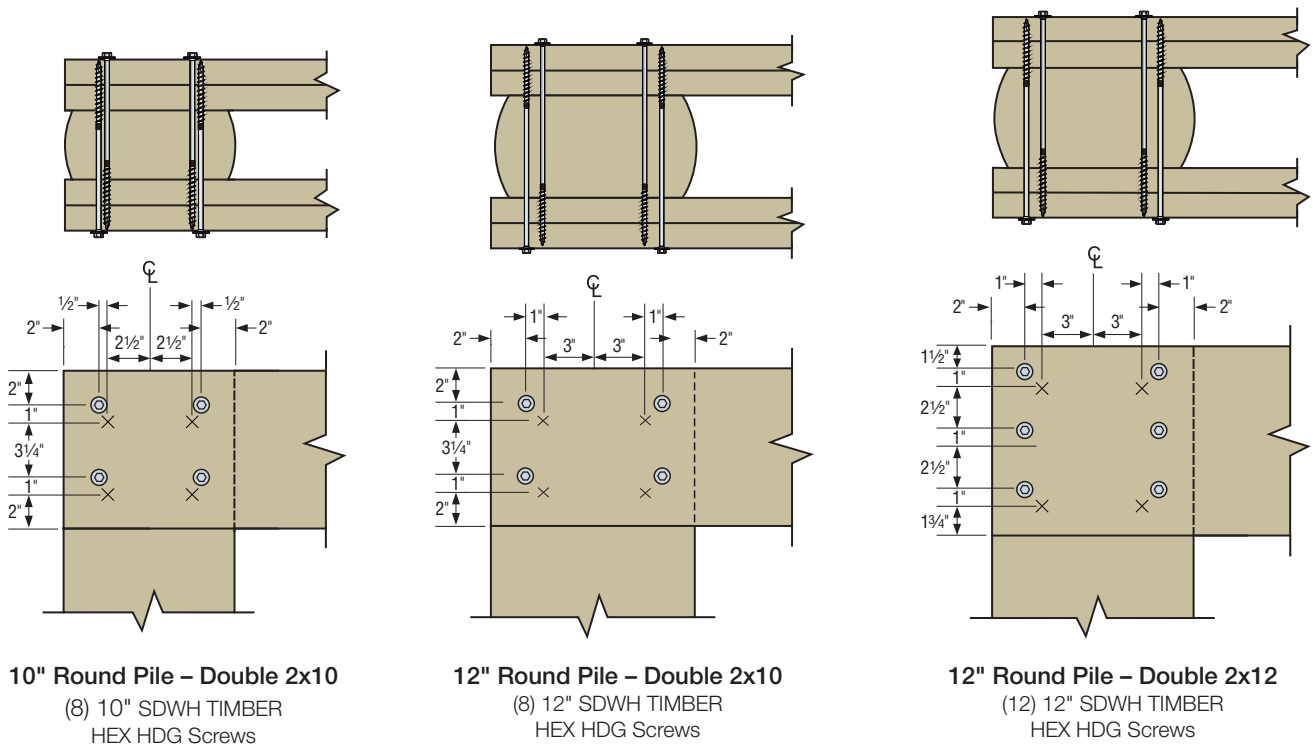
Single Stringer – End Condition



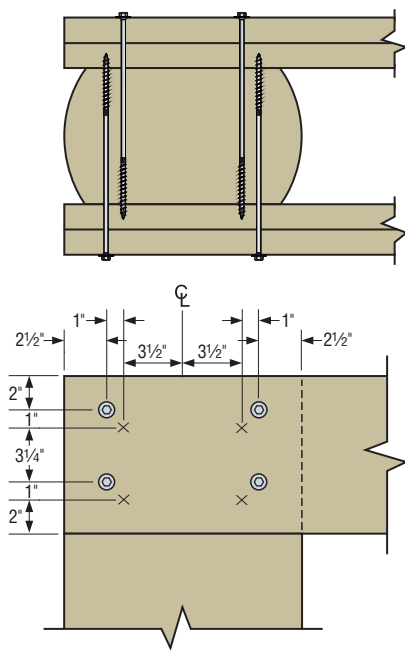
Round Piling – Single Stringer – Continuous Condition



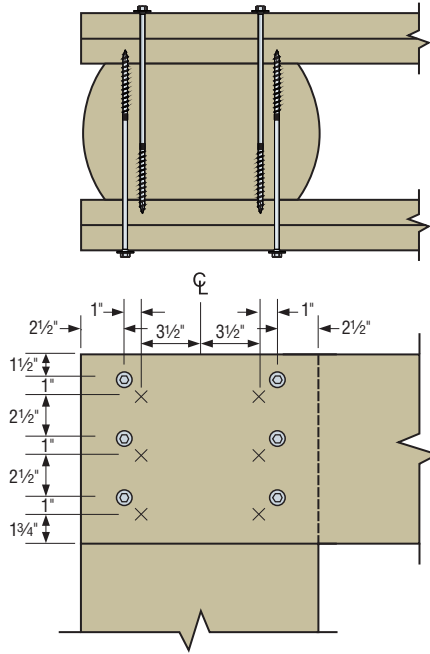
Double Stringer – End Condition



Round Piling – Double Stringer – End Condition

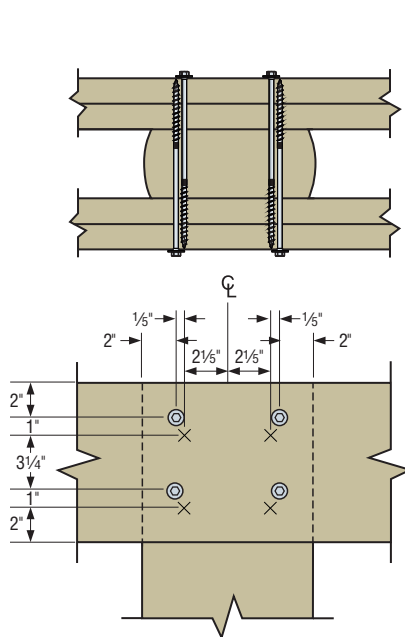


14" Round Pile – Double 2x10
(8) 12" SDWH TIMBER
HEX HDG Screws

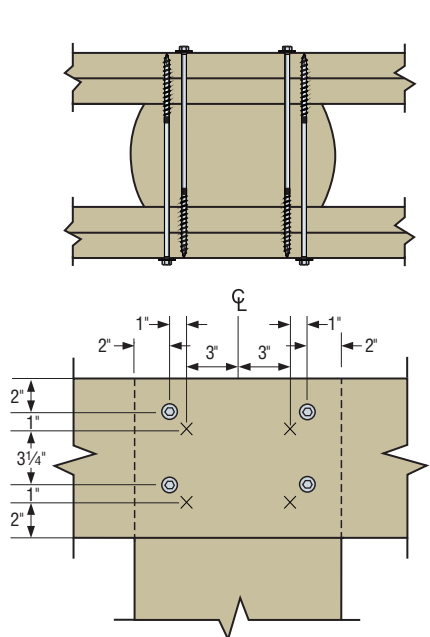


14" Round Pile – Double 2x12
(12) 12" SDWH TIMBER
HEX HDG Screws

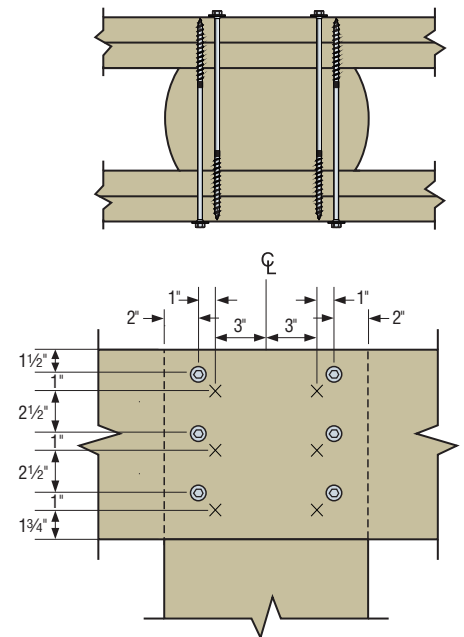
Double Stringer – Continuous Condition



10" Round Pile – Double 2x10
(8) 10" SDWH TIMBER
HEX HDG Screws

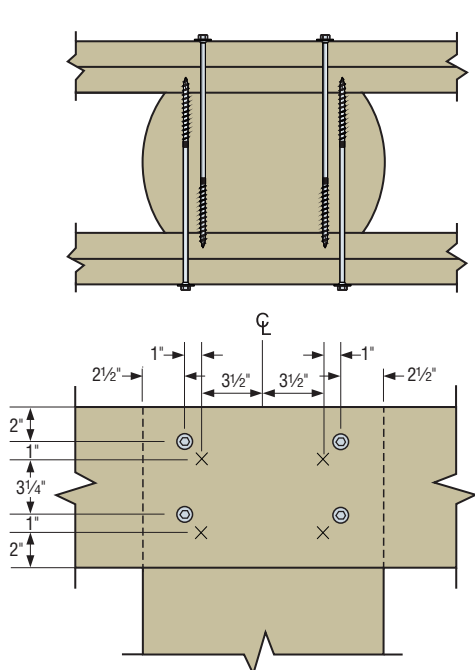


12" Round Pile – Double 2x10
(8) 12" SDWH TIMBER
HEX HDG Screws

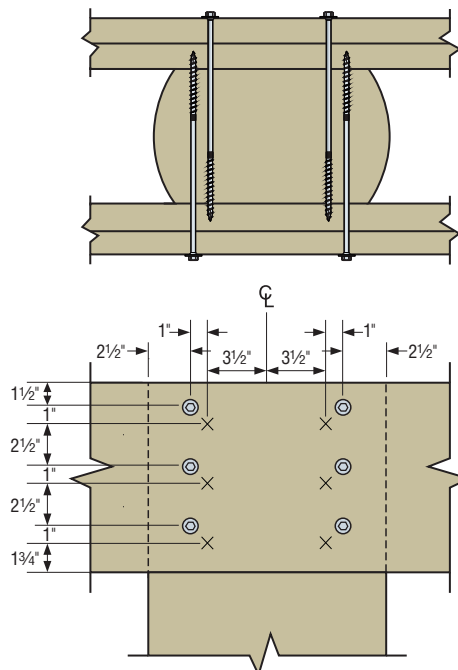


12" Round Pile – Double 2x12
(12) 12" SDWH TIMBER
HEX HDG Screws

Round Piling – Double Stringer – Continuous Condition



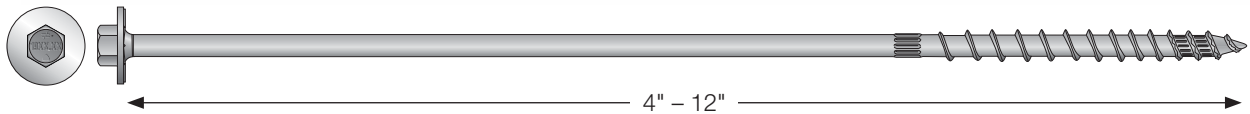
14" Round Pile – Double 2x10
(8) 12" SDWH TIMBER
HEX HDG Screws



14" Round Pile – Double 2x12
(12) 12" SDWH TIMBER
HEX HDG Screws

Products

Available in convenient package sizes for your next project



Product Information

Screw Length (in.)	Screw Dia. (in.)	Hex-Drive (in.)	Thread Length (in.)	Individually Flagged Retail Box		Retail		Mini-Bulk		Bucket	
				Fasteners Per Pack	Model No.	Fasteners Per Pack	Model No.	Fasteners Per Pack	Model No.	Fasteners Per Pack	Model No.
4	0.276	3/8	3	40	SDWH27400G-RP1	30	SDWH27400GR30	150	SDWH27400GMB	350	SDWH27400G
6	0.276	3/8	3	35	SDWH27600G-RP1	30	SDWH27600GR30	150	SDWH27600GMB	300	SDWH27600G
8	0.276	3/8	3	25	SDWH27800G-RP1	30	SDWH27800GR30	150	SDWH27800GMB	—	—
10	0.276	3/8	3	25	SDWH271000G-RP1	30	SDWH271000GR30	150	SDWH271000GMB	—	—
12	0.276	3/8	3	25	SDWH271200G-RP1	30	SDWH271200GR30	150	SDWH271200GMB	—	—

Single Shear Loads

Screw Length (inches)	Screw Diameter (inches)	Thread Length (inches)	Screw Model No.	Allowable Shear Loads (lbs.)						Allowable Withdrawal Load, W (lbs./inch)		
				Wood Side Member Thickness (inches)						SP	DFL	HF/SPF
				SP		DF		HF/SPF				
1.5	3	1.5	3	1.5	3	SP	DFL	HF/SPF				
4	0.276	3	SDWH27400G	505	—	440	—	400	—	287	255	212
6	0.276	3	SDWH27600G	505	545	440	545	400	450			
8	0.276	3	SDWH27800G	570	675	430	675	430	595			
10	0.276	3	SDWH271000G	570	675	430	675	430	595			
12	0.276	3	SDWH271200G	570	675	430	675	430	595			

- 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 wood 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.
- For in-service moisture content greater than 19% : withdrawal $C_M=0.65$; shear $C_M=0.68$.
- For multiple fasteners, minimum fastener spacing requirements: 8" end distance, 1 1/2" edge distance, 3/8" between staggered rows of fasteners, 4" between non-staggered rows of fasteners and 8" between fasteners in a row, multiply the table values by 0.80.
- Tabulated loads are for both parallel and perpendicular to grain loading.
- Maximum withdrawal loads are based on the length of threads in the main member.

Strong-Drive[®]

STRUCTURAL FASTENERS



STRUCTURAL
WOOD Screws



STRUCTURAL
METAL Screws



STRUCTURAL
NAILS

When Performance is Critical



Best-in-class, load-tested fasteners: Strong-Drive[®] structural fasteners are engineered and extensively tested to efficiently meet your most demanding wood and metal applications. Stronger can also be faster. The Strong-Drive family is designed to install easier than other fastening methods, which saves time and money. Learn more, call (800) 999-5099 or visit www.strongtie.com/strongdrive.

This flier is effective until December 31, 2016, and reflects information available as of November 1, 2014. This information is updated periodically and should not be relied upon after December 31, 2016; visit www.strongtie.com for current information.