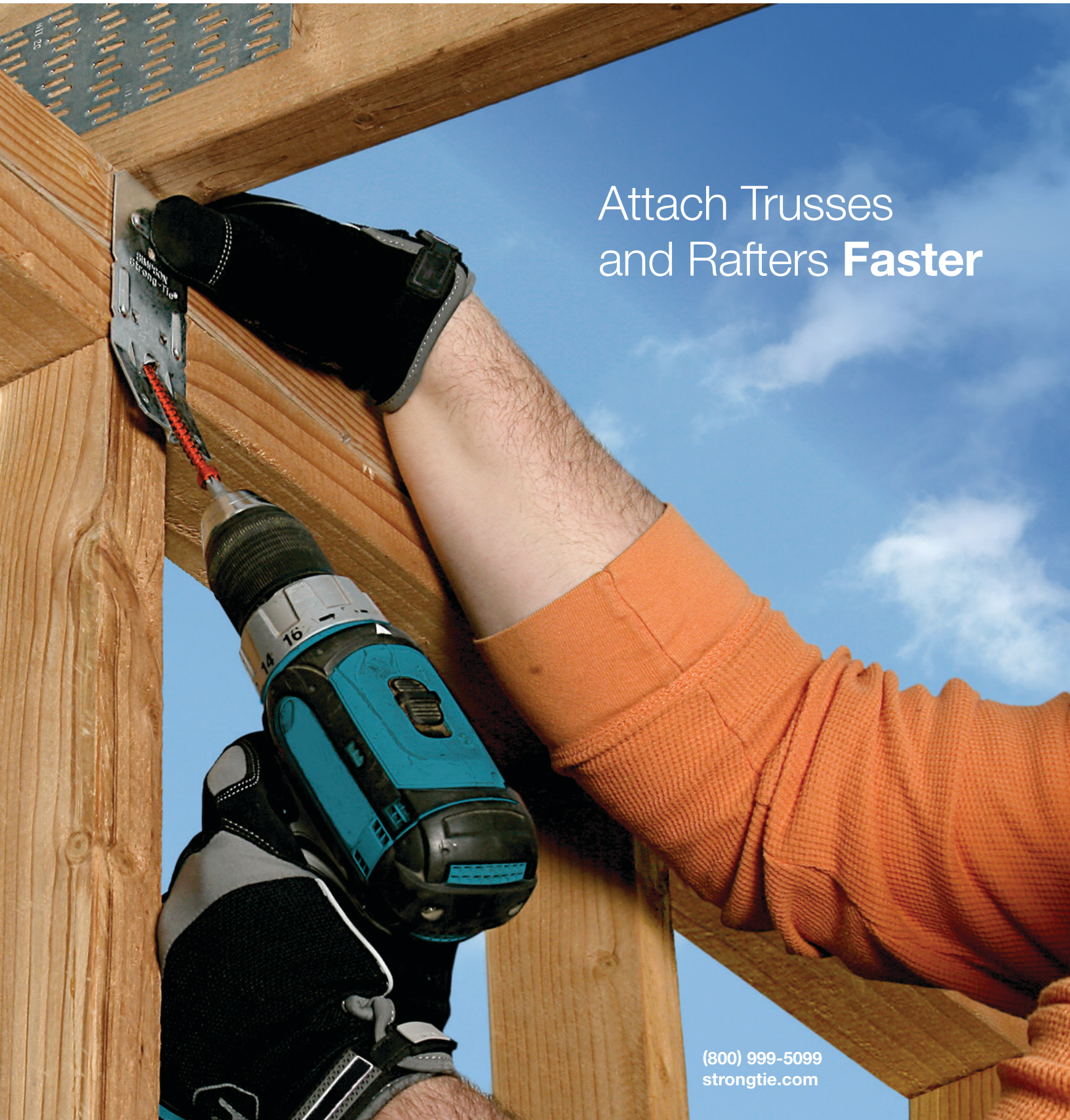
Strong-Drive®

SDWC™ **TRUSS** Screw

Truss/Rafter-to-Plate and Stud-to-Plate Connections

SIMPSON Strong-Tie®



Attach Trusses and Rafters **Faster**

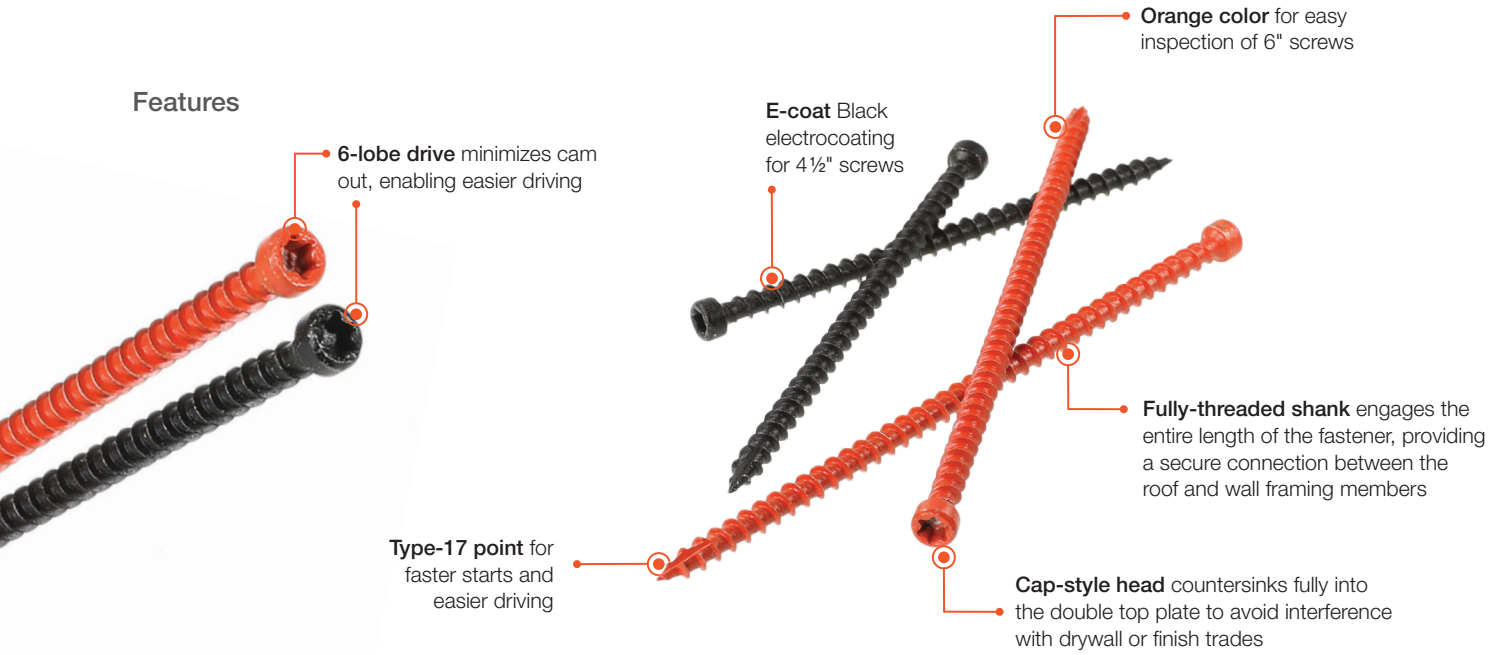
(800) 999-5099
strongtie.com

For Truss/Rafter-to-Plate and Stud-to-Plate Connections

The Strong-Drive SDWC Truss screw provides a stud-to-bottom plate or stud-to-top plate connection as well as a method to fasten trusses and rafters to top plates. The fully-threaded shank engages the entire length of the fastener providing a secure connection. The SDWC is tested in accordance with ICC-ES AC233 (screw) and AC13 (wall assembly and roof-to-wall assembly) for uplift and lateral loads between wall plates and vertical wall framing, and between the top plate and the roof rafters or trusses.

Codes/Standards: IAPMO UES ER-262

Features



- Wide tolerance on installation angle makes it easy to install the SDWC correctly
- Can be installed from inside the structure, eliminating exterior work on the upper stories and enhancing job safety
- Fastening can be performed before or after exterior sheathing is applied for added flexibility
- Metal installation guide tool (included) to help ensure proper installation
- Matched-tolerance driver bit (included) engages fastener head securely to allow one-handed driving (replacement bit part no. BIT30T-2-R2)
- SDWC15450 is recognized for use in preservative-treated wood as described in the evaluation report

SDWC15450-KT and SDWC15600-KT contains:

- (50) Strong-Drive SDWC screws
- (1) Matched-tolerance driver bit (Part no. BIT30T-2-R2; also sold separately)
- (1) Metal installation guide tool
  - SDWC-GUIDE for SDWC15600 only; also sold separately
    or
  - SDWC-GUIDE275 for SDWC15450 only; also sold separately

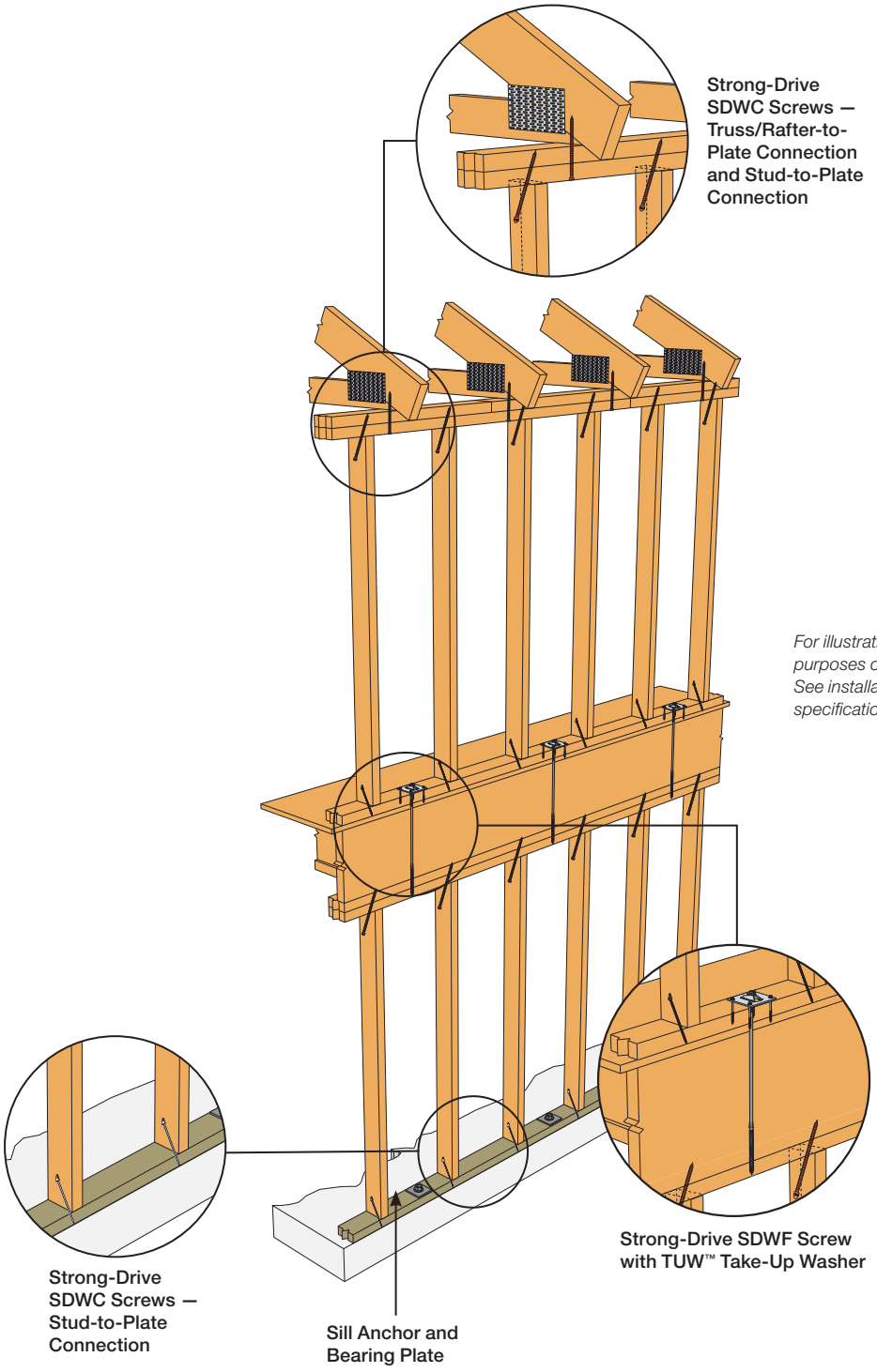
SDWC15450B-KT and SDWC15600B-KT contains:

- (500) Strong-Drive SDWC screws
- (2) Matched-tolerance driver bits (Part no. BIT30T-2-R2; also sold separately)
- (2) Metal installation guide tools
  - SDWC-GUIDE for SDWC15600 only; also sold separately
    or
  - SDWC-GUIDE275 for SDWC15450 only; also sold separately

Strong-Drive SDWC **TRUSS** Screw

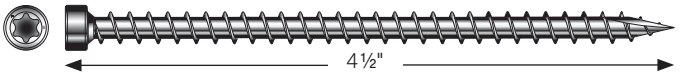
Building codes require structures to be designed to create a continuous load path. Forces must be transferred from their point of origin to the building elements that are designed to resist them. When uplift forces act on a roof, the roof must be tied down to the wall below it, and if the uplift forces are large enough, the wall must be tied down to the foundation or wall below.

Like many common hurricane ties, the SDWC screw fastens the rafter or truss directly to the top plate of the wall below. The wall top plate alone does not offer sufficient resistance to roof uplift forces, and therefore must be tied to the studs or framing below. For more information, refer to **strongtie.com/SDWC** or *Fastening Systems Technical Guide*, C-F-20xxTECHSUP.



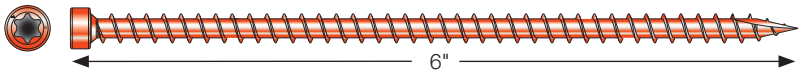
For illustrative purposes only. See installation specifications.

General Load Information



E-coat

Size	Thread Length (in.)	Retail Pack			Mini-Bulk Bucket	
		Fasteners per Pack	Retail per Master Carton	Model No.	Fasteners per Bucket	Model No.
0.152 x 4½	4¼	50	6	SDWC15450-KT	500	SDWC15450B-KT



Clear Zinc Coating (with Orange Topcoat)

Size	Thread Length (in.)	Retail Pack			Mini-Bulk Bucket	
		Fasteners per Pack	Retail per Master Carton	Model No.	Fasteners per Bucket	Model No.
0.152 x 6	5¾	50	6	SDWC15600-KT	500	SDWC15600B-KT

Allowable Shear Loads — DFL, SP, SPF

Model No.	Fastener Length (in.)	Thread Length (in.)	Side Member	Main Member	Allowable Shear Loads (lb.)					
					Z_{para}			Z_{perp}		
					SP	DFL	SPF	SP	DFL	SPF
SDWC15450	4½	4¼	2x (Face)	2x (End Grain)	—	—	—	225	205	190
SDWC15600	6	5¾	(2)2x (Face)	2x (Edge)	245	240	180	240	240	240
			2x (Face)	2x (End Grain)	—	—	—	225	205	190
			(2)2x (Face)	2x (End Grain)	—	—	—	225	225	190

1. Allowable loads are shown at the wood load duration factor of C_D = 1.0. Loads may be increased for load duation up to a C_D = 1.6.
2. Tabulated values must be multiplied by all applicable adjustment factors per the NDS.
3. The main and side members shall be sawn lumber or structural composite lumber with a specific gravity or equivalent specific gravity 0.42 to 0.55.
4. Z_{para} — Parallel-to-grain loading in the side member and perpendicular-to-grain loading in the main member.
5. Z_{perp} — Perpendicular-to-grain loading in the side member and perpendicular-to-grain loading in the main member, except for 2x (edge) where main member is loaded parallel to grain.
6. The connection conditions of this table are for specific intended applications. Reference lateral design values for all other shear connections are calculated following the NDS.

Allowable Withdrawal and Pull-Through Loads — DFL, SP, SPF

Model No.	Screw Length (in.)	Thread Length (in.)	Main Member	Allowable Withdrawal Loads (lb./in.)			Allowable Pull-Through Loads (lb./in.)		
				SP	DFL	SPF	SP	DFL	SPF
SDWC15450	4½	4¼	2x (Edge)	250	230	150	—	—	—
			2x (End Grain)	200	140	100	208	180	175
SDWC15600	6	5¾	2x (Face)	210	180	120	255	195	160
			(2) 2x (Face)	220	200	160	240	225	190

1. Allowable loads are shown at the wood load duration factor of C_D = 1.0. Loads may be increased for load duration up to a C_D = 1.6.
2. Tabulated values must be multiplied by all applicable adjustment factors per the NDS.
3. The reference withdrawal and pull-through values are in pounds per inch of the thread penetration into the main member and a minimum 1½"-thick side member, respectively.

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