

2-1/2", 21mils (25ga) ClarkDietrich Shaftwall System

ClarkDietrich C-T Cavity Shaftwall System

ClarkDietrich C-T Cavity Shaftwall Studs are high-performance members engineered to maintain shaftwall integrity. C-T Studs are designed for use with 1" thick gypsum 24" wide liner panels. Gypsum liner panels are inserted into the "T" portion of the stud and are friction fit. The system is finished with fire rated gypsum board to complete and achieve the designated fire rating.

ClarkDietrich J-Tabbed Track is used at the floor and ceiling in shaftwall assemblies. C-T studs and gypsum shaftliner panels are friction fit between the top and bottom J-Tabbed Track. J-Tabbed Tracks have unequal legs. The longer leg (available in 2-1/4" and 3") is installed on the shaft side providing a backstop for easy installation of the liner panel. Three-inch leg track is typically used as jamb struts around closure details, including duct and door openings, abutments and intersections.

Product Data & Ordering Information:

Product Code	Description	Minimum Thickness	Design Thickness	J-Tabbed Track w/ 2-1/4" leg	J-Tabbed Track w/ 3" leg
250CT-21	2-1/2" C-T Stud	0.0219"	0.0231"	250JR-21	250JR3-21

All material is produced with a coating of G40EQ (G40/G60 available)

CT Stud Gross Structural Properties:

Product Code	Description	Weight (lb/ft)	Area (in ²)	I _x (in ⁴)	S _x (in ³)	Steel Fy (ksi)	Pcs/Skid
250CT-21	2-1/2" C-T Stud	0.514	0.165	0.164	0.114	33	210

Code Approvals & Performance Standards:

- Shaftwall products are produced to meet or exceed ASTM C645 and A1003
- UL Design No. U417, U428, U429, U497, U498, V455 and V473
- ICC-ES Evaluation Report ESR-5050
- SDS & Product Certification Information is available at www.clarkdietrich.com/SupportDocs

Limiting Heights - Design Pressure:

Deflection	5 psf	7.5 psf	10 psf	15 psf
L/120	16'-10"	13'-8"	11'-10" *	8'-6" **
L/240	11'-10"	9'-10"	8'-8"	7'-3"
L/360	9'-10"	8'-3"	7'-3"	6'-2"

*Reduced for End Reaction capacity

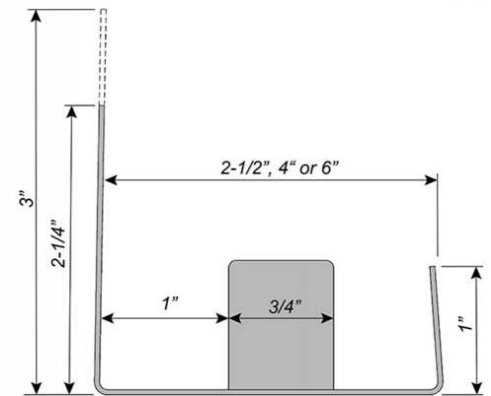
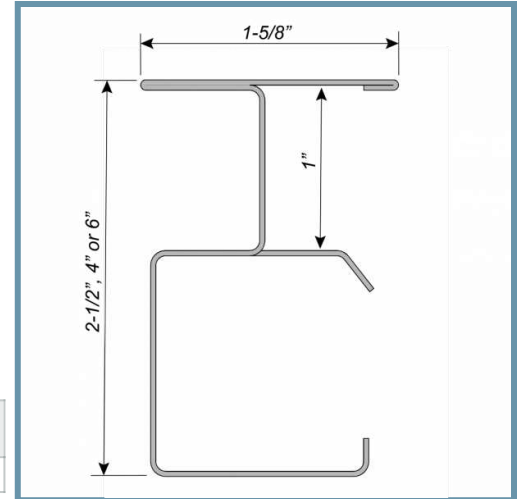
**Reduces for Flexural Strength Capacity

1. The values in this table are based on testing per ICC-ES AC 86 and ASTM E72 and represent the limiting height capacity for strength using a 1.5 Safety Factor.
2. Limiting Height values shown, were assessed from the lowest Flexural Strength value of Gypsum tested.

See heights & installation notes in [ICC-ES Evaluation report ESR-5050](#) or on www.clarkdietrich.com/shaftwall.

Sustainability Credits For more details and LEED letters contact Technical Services at 888-437-3244 or visit clarkdietrich.com/LEED.

- **LEED v4.1 MR Credit:** Environmental Product Declarations: EPD (1 point) - Sourcing of Raw Materials (up to 2 points) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points)
- **LEED v4 MR Credit:** Building Product Disclosure and Optimization: EPD (1 point) - Sourcing of Raw Materials (1 point) - Material Ingredients (1 point) - Construction and Demolition Waste Management (up to 2 points) - Innovation Credit (up to 2 points).



J-Tabbed Track / J-Runner

