



# Product Specification and Submittal Form

## INSIDE CORNER (ICS) 135° STUD

### MANUFACTURER

Steeler, Inc.  
10023 Martin Luther King Jr. Way S.  
Seattle, WA 98178  
Phone: (206) 725-2500  
Fax: (206) 725-1700

Steeler, Inc.  
6851 Smith Ave.  
Newark, CA 94560  
Phone: (510) 505-9595  
Fax: (510) 505-0200

### DESCRIPTION

**ICS (Inside Corner) 135° Studs** are made of galvanized steel and available in 22 gauge (27 mil) to 16 gauge (54 mil) thicknesses. They have two 2" faces bent to 135° outside angle, with 90° flanges of 1.25" (or 1.625" for 18 & 16 gauge) and 90° lip returns of 0.30" for stiffness.

### MATERIALS

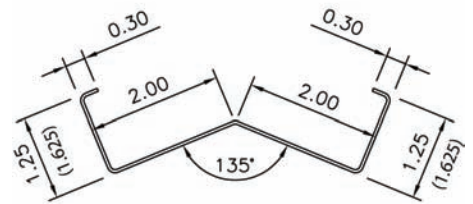
**Inside Corner Studs** sections are fabricated from hot dipped galvanized steel conforming to ASTM A653 -02a or equal.

### ASTM & Code Standards

- AISI, North American Specification for the Design of Cold-Formed Steel Structural Members 2001 Edition with 2004 Supplement
- ASTM A370, Standard Test Methods and Definitions for Mechanical Testing of Steel Products
- ASTM A1003, Standard Specification for Sheet Steel, Carbon, Metallic and Non-Metallic Coating for Cold-Formed Framing Members.
- Steeler's structural framing comply with 2006 International Building Code (IBC-2006)
- ASTM C955, Standard Specification for Structural Steel Framing Members.
- ASTM C754, Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products.
- ASTM C1513, Standard Specification for Steel Tapping Screws for Cold-Formed Steel Framing Connections.
- ASTM C645, Standard Specification for Nonstructural Steel Framing Members.

### COLOR CODE

- 27 mil - Black
- 30 mil - Pink
- 33 mil - White
- 43 mil - Yellow
- 54 mil - Green
- Painted on ends.



400 ICS 135-XX

GROSS PROPERTY TABLES--INSIDE 135° CORNER STUDS

MEMBER ID	GA	T, in	A, in <sup>2</sup>	WT, plf	I <sub>x</sub> , in <sup>4</sup>	r <sub>x</sub> , in	I <sub>y</sub> , in <sup>4</sup>	r <sub>y</sub> , in
400 ICS 135-27	(22)	0.0283	0.1927	0.6553	0.02066	0.3274	0.4766	1.5726
400 ICS 135-30	(21)	0.0312	0.2121	0.7211	0.02260	0.3264	0.5290	1.5702
400 ICS 135-33	(20)	0.0346	0.2347	0.7979	0.02484	0.3253	0.5766	1.5676
400 ICS 135-43	(18)	0.0451	0.3038	1.0329	0.03147	0.3218	0.7386	1.5592
400 ICS 135-54	(16)	0.0566	0.3764	1.2799	0.03764	0.3162	0.9010	1.5471

EFFECTIVE PROPERTY TABLES

MEMBER Identification	FY=33 KSI			
	Maxo k-in	I <sub>xe</sub> in <sup>4</sup>	S <sub>xe</sub> (t) in <sup>3</sup>	S <sub>xe</sub> (b) in <sup>3</sup>
400 ICS 135-27	0.5497	0.02066	0.02782	0.04184
400 ICS 135-30	0.6019	0.02260	0.03046	0.04574
400 ICS 135-33	0.6621	0.02484	0.03351	0.05023
400 ICS 135-43	0.8419	0.03147	0.04261	0.06352
400 ICS 135-54	1.0106	0.03764	0.05114	0.07678

LIMITING HEIGHT TABLE, 5 psf, F<sub>y</sub>=33 ksi

MEMBER Identification	Member Height, ft		
	First Stud Spacing, in.		
	6"	8"	10"
400 ICS 135-27	12.11	10.49	9.38
400 ICS 135-30	12.67	10.97	9.81
400 ICS 135-33	13.29	11.51	10.29
400 ICS 135-43	14.98	12.98	11.61
400 ICS 135-54	16.42	14.22	12.72

NOTE:  
HEIGHT TABLE BASE ON STRENGTH W/O STRESS INCREASE