

INTRODUCING

# DIAMOND

STEEL FRAMING™

Diamond Steel  
Framing™ Stud

Embossed chevrons increase strength and provide proper orientation during installation.

Stiffening ribs provide additional strength and rigidity.

Knockouts of both 1 1/2" and 3/4" channels.

Deep knurling dimple embossing allows for rapid screw connections.

Embossed track spacing for faster, more accurate installation.

Diamond Steel  
Framing™ Track

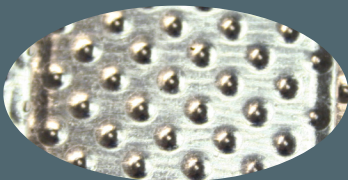
## Available Stud Sizes

- 1 5/8"

- 2 1/2"

- 3 5/8"

- 6"



Through Diamond's unique deep knurling dimple embossing process, the framing material is hardened and the yield strength of the end product is greatly increased.

 **SEMCO**  
SOUTHEASTERN METALS

A GIBRALTAR INDUSTRIES COMPANY 

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STEEL FRAMING™

## Economical Option

Diamond Steel Framing™ saves time, money and labor costs and is an more energy efficient choice over traditional materials. Additionally, steel framing often reduces building insurance costs.

## Environmentally Friendly

Diamond Steel Framing™ is 100% recyclable and saves trees by avoiding the use of traditional lumber.

## Better Quality

Diamond Steel Framing™ produces straighter and stronger walls. Pre-punched holes allow for easier installation of plumbing and electricity. Roll-forming process produces consistent, quality product.

## Safer Than Lumber

Unlike traditional wood framing, Diamond Steel Framing™ won't burn and can easily meet one hour fire ratings.

## Long Lasting

Diamond Steel Framing™ will not rot, warp, twist, bow, crack, split, swell or shrink. Steel framing is termite and insect proof and made of the most durable framing material.

## Easier Installation

Diamond Steel Framing™ is easier to cut and lighter to handle than traditional lumber. Embossed material provides enhanced screw retention and prevents against screw spin out.



**Fire Resistance Rated**  
Design No. V485 - 1 Hour

## Applicable ASTM & Performance Standards

**ASTM C-645** - Standard Specification for Non-Structural Steel Framing Members

**ASTM C-754** - Standard Specification for Installation of Steel Framing Members to Receive Screw-Attached Gypsum Panel Products

**ASTM A653** - (steel) min. Grade 50 KSI Yield Embossed

**ASTM A1003** - Protective Coating: G40 or equivalent

**ASTM A463** - (General. Spec. A924)

**ASTM E119** - Standard Test Methods for Fire Tests of Building Construction and Materials

**ANSI / UL – 263** - Fire Tests of Building Construction and Materials

## Load Tables

**25 EQ Composite Limiting Heights (One Layer 1/2" Gypsum Wallboard)**  
1 1/4" Flange with 1/4" Return Steel Minimum Yield Strength Grade 50

Stud Size	Spacing Inches	5 psf			7.5 psf			10 psf			15 psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1 5/8"	12"	12'-0"	9'-11"	8'-8"	10'-8"	8'-8"	--	9'-11"	7'-11"	--	8'-8"	--	--
	16"	11'-0"	9'-0"	7'-11"	9'-6"	7'-11"	--	9'-0"	--	--	--	--	--
	24"	9'-4"	7'-11"	--	8'-4"	--	--	7'-11"	--	--	--	--	--
2 1/2"	12"	15'-8"	12'-5"	10'-10"	13'-8"	10'-10"	9'-6"	12'-3"	9'-11"	8'-8"	9'-6"	8'-8"	--
	16"	14'-2"	11'-3"	9'-10"	12'-5"	9'-10"	8'-7"	11'-3"	8'-11"	7'-10"	10'-9"	7'-10"	--
	24"	12'-4"	9'-10"	8'-7"	10'-9"	8'-7"	--	9'-8"	7'-9"	--	8'-10"	--	--
3 5/8"	12"	20'-10"	16'-7"	14'-3"	18'-3"	14'-3"	12'-3"	16'-3"	12'-10"	11'-0"	12'-8"	11'-0"	9'-6"
	16"	19'-1"	15'-1"	12'-10"	16'-4"	12'-10"	11'-0"	13'-10"	11'-6"	9'-11"	10'-8"	9'-11"	8'-6"
	24"	17'-0"	12'-11"	11'-0"	13'-1"	11'-0"	9'-5"	11'-0"	9'-11"	8'-6"	8'-8"	8'-4"	8'-0"
6"	12"	29'-10"	23'-8"	20'-9"	24'-6"	20'-9"	18'-1"	20'-8"	18'-10"	16'-5"	13'-8"	13'-4"	13'-0"
	16"	25'-6"	21'-6"	18'-9"	20'-10"	18'-9"	16'-5"	17'-0"	16'-0"	14'-8"	11'-4"	11'-0"	10'-8"
	24"	20'-5"	18'-9"	16'-5"	16'-9"	16'-5"	12'-10"	13'-4"	11'-8"	12'-3"	8'-11"	8'-6"	8'-0"

**20 EQ Composite Limiting Heights (One Layer 1/2" Gypsum Wallboard)**  
1 1/4" Flange with 1/4" Return Steel Minimum Yield Strength Grade 50

Stud Size	Spacing Inches	5 psf			7.5 psf			10 psf			15 psf		
		L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360	L/120	L/240	L/360
1 5/8"	12"	17'-4"	13'-9"	12'-0"	15'-2"	12'-0"	7'-7"	13'-9"	8'-9"	--	12'-0"	--	--
	16"	12'-8"	10'-1"	8'-10"	11'-1"	8'-10"	7'-8"	10'-0"	8'-0"	--	8'-10"	--	--
	24"	14'-0"	9'-0"	--	12'-3"	--	--	9'-0"	--	--	--	--	--
2 1/2"	12"	19'-10"	15'-9"	13'-6"	17'-4"	13'-6"	10'-8"	15'-9"	11'-5"	9'-1"	13'-6"	9'-1"	7'-10"
	16"	16'-5"	13'-0"	11'-4"	14'-4"	11'-4"	9'-11"	13'-0"	10'-4"	9'-0"	9'-4"	8'-0"	7'-0"
	24"	16'-0"	11'-10"	9'-4"	14'-0"	9'-5"	7'-8"	11'-10"	8'-1"	--	8'-3"	--	--
3 5/8"	12"	22'-0"	17'-5"	15'-1"	19'-2"	15'-1"	12'-10"	17'-5"	13'-5"	11'-5"	15'-1"	11'-5"	9'-9"
	16"	19'-4"	15'-4"	13'-5"	16'-11"	13'-5"	11'-9"	15'-4"	12'-2"	10'-8"	12'-10"	10'-8"	9'-3"
	24"	17'-8"	13'-8"	11'-7"	15'-5"	11'-7"	9'-11"	13'-8"	10'-4"	8'-10"	11'-6"	8'-10"	7'-6"
6"	12"	30'-8"	24'-4"	21'-3"	26'-9"	21'-3"	18'-7"	24'-4"	19'-4"	16'-10"	21'-3"	16'-10"	14'-7"
	16"	28'-0"	22'-3"	19'-5"	24'-6"	19'-5"	17'-0"	23'-3"	17'-8"	15'-5"	18'-8"	15'-5"	13'-5"
	24"	25'-0"	19'-10"	17'-4"	21'-8"	17'-4"	14'-10"	18'-10"	15'-7"	13'-2"	14'-2"	13'-2"	11'-3"