



**Ramset<sup>®</sup>-I-F**

**Insulation Fastening System**



***The Thermal Break Fastener that Installs in Seconds***



Above acoustical ceilings



Foundations & basements



Interior walls on concrete block



Behind cladding over wood stud walls



Behind cladding over concrete block walls



Behind cladding over steel stud walls

## Ramset-I-F Insulation Fastening System Is...

### Safer and up to 4X faster than stick-pin fasteners:

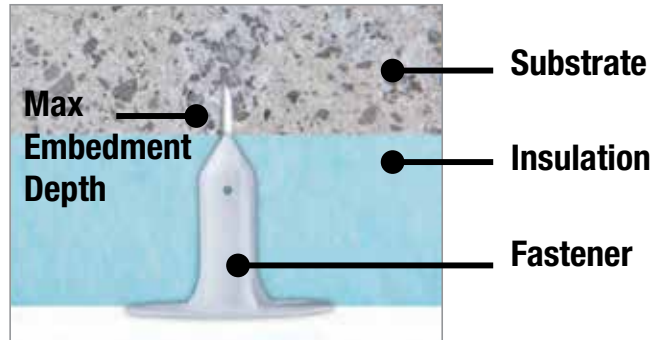
- No need to pre-measure fastener location or prepare substrate
- No need to wait for fastener plate adhesive to dry
- No need for fastener pins base plate
- No need to push washers on pins and trim pin length
- No need to tape over washers

### Safer than gun-powder-driven fastening:

- Delivers less recoil to the installer
- No spent powder casings on the jobsite
- Does not require installer licensing

### Safer and faster than screw and washer fasteners:

- Delivers less torque to the installer's wrist and elbow
- Does not require assembly
- Drives faster than a screw taps



### Ramset-I-F will attach:



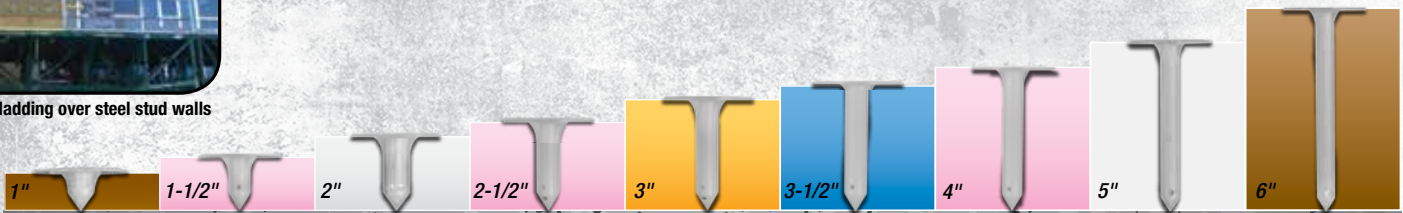
Mineral Wood

Extruded Polystyrene

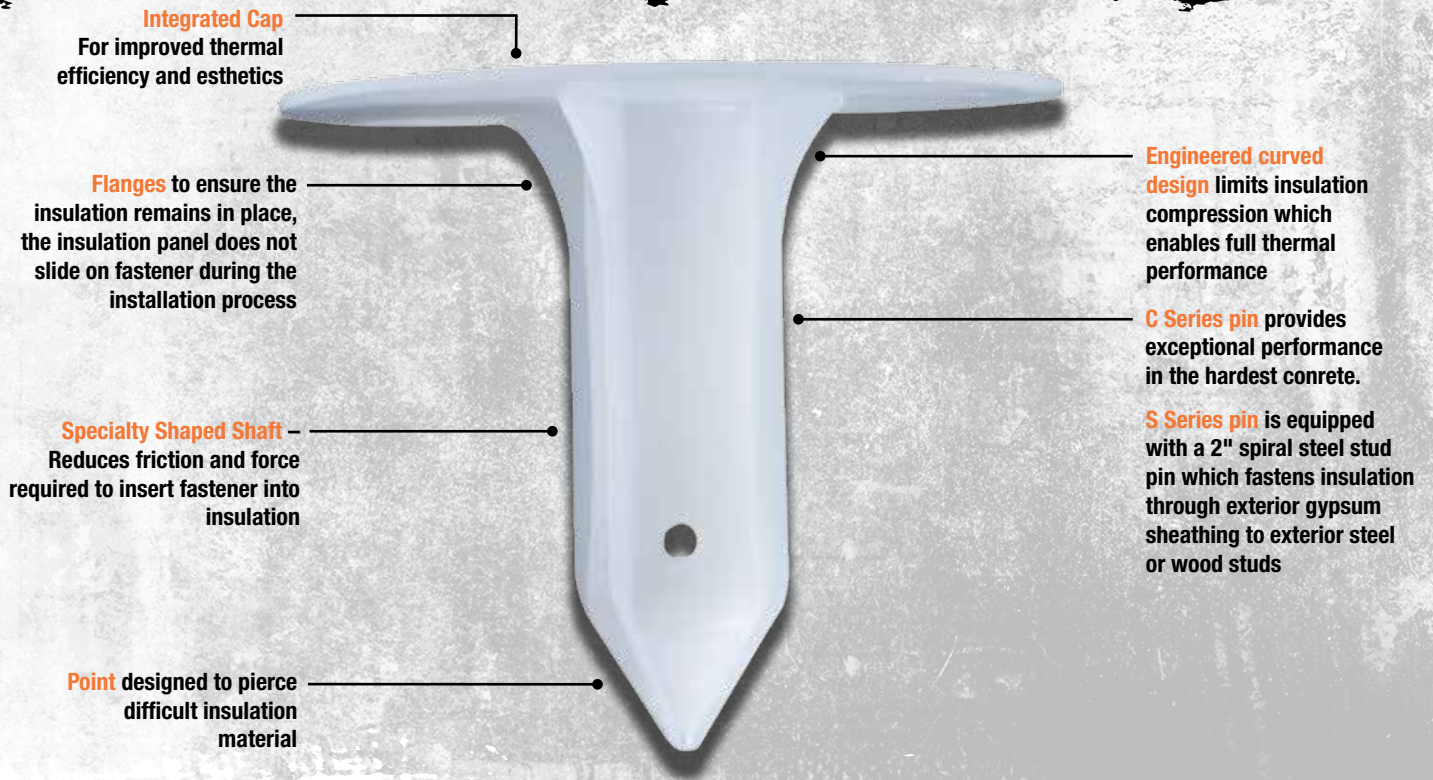
Expanded Polystyrene

Fiberglass

Polyisocyanurate



**CONCRETE OR BLOCK**



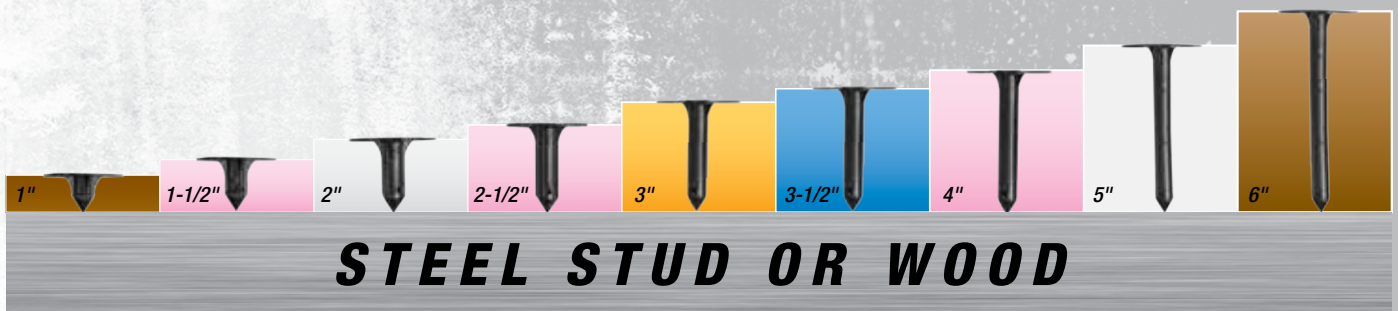
### Selection Charts:

#### FASTENERS FOR CONCRETE AND CMU

PART NUMBER	DESCRIPTION	INSULATION THICKNESS	BOX QTY
IFC-100v2	1" Ramset-I-F Pin for Concrete	1"	500
IFC-112v2	1-1/2" Ramset-I-F Pin for Concrete	1-1/2"	500
IFC-200v2	2" Ramset-I-F Pin for Concrete	2"	500
IFC-212v2	2-1/2" Ramset-I-F Pin for Concrete	2-1/2"	500
IFC-300v2	3" Ramset-I-F Pin for Concrete	3"	500
IFC-312v2	3-1/2" Ramset-I-F Pin for Concrete	3-1/2"	500
IFC-400v2	4" Ramset-I-F Pin for Concrete	4"	500
IFC-500v2	5" Ramset-I-F Pin for Concrete	5"	500
IFC-600v2	6" Ramset-I-F Pin for Concrete	6"	400
T3IF-6	T3 Ramset-I-F Tool (6" Capacity)	-	1
T3FUEL	Fuel Cells (12 Cells)	-	1

#### FASTENERS FOR STEEL OR WOOD STUDS

PART NUMBER	DESCRIPTION	INSULATION THICKNESS	BOX QTY
IFS-100	1" Ramset-I-F Pin for Steel	1"	500
IFS-112	1-1/2" Ramset-I-F Pin for Steel	1-1/2"	500
IFS-200	2" Ramset-I-F Pin for Steel	2"	500
IFS-212	2-1/2" Ramset-I-F Pin for Steel	2-1/2"	500
IFS-300	3" Ramset-I-F Pin for Steel	3"	500
IFS-312	3-1/2" Ramset-I-F Pin for Steel	3-1/2"	500
IFS-400	4" Ramset-I-F Pin for Steel	4"	500
IFS-500	5" Ramset-I-F Pin for Steel	5"	500
IFS-600	6" Ramset-I-F Pin for Steel	6"	400
T3IF-6	T3 Ramset-I-F Tool (6" Capacity)	-	1
T3FUEL	Fuel Cells (12 Cells)	-	1





## Performance

		Insulation Thickness					
		1 in	2 in	3 in	4 in	5 in	6 in
Reference	U – Factor (W/m <sup>2</sup> °C)	1.1786	0.7122	0.5103	0.3976	0.3257	0.2758
	Efficiency (%)	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
Stick Pin	U – Factor (W/m <sup>2</sup> °C)	1.2422	0.7706	0.5597	0.4397	0.3621	0.3078
	Efficiency (%)	94.88%	92.42%	91.17%	90.43%	89.94%	89.59%
Ramset-I-F	U – Factor (W/m <sup>2</sup> °C)	1.1845	0.7162	0.5132	0.3999	0.3276	0.2773
	Efficiency (%)	99.50%	99.45%	99.44%	99.43%	99.42%	99.42%

\*Cap must be closed to achieve efficiency.



For tool service, please visit  
[www.ramsetrepair.com](http://www.ramsetrepair.com)  
 or call 800-222-6990.

## CONCRETE

PART NUMBER SERIES	SHANK DIAMETER (INCH)	MINIMUM PENETRATION (INCH)	INSTALLED IN STONE AGGREGATE CONCRETE (lbf)			
			MINIMUM CONCRETE COMPRESSIVE STRENGTH (PSI)			
			2000 PSI		4000 PSI	
			TENSION	SHEAR	TENSION	SHEAR
IFC	0.125	5/8	<b>83</b> - 414	<b>109</b> - 611	<b>78</b> - 426	<b>80</b> - 574
		3/4	<b>107</b> - 541	<b>156</b> - 855	<b>104</b> - 593	<b>195</b> - 977

\*Bold number is allowable load, second number is average ultimate load.

## HOLLOW CONCRETE BLOCK

PART NUMBER SERIES	SHANK	MINIMUM	3000 PSI LT WT CONCRETE (lbf)		HOLLOW CONCRETE MASONRY UNITS (CMU) (lbf) - ANY LOCATION	
			TENSION	SHEAR	TENSION	SHEAR
			IFC	0.125	5/8	<b>84</b> - 418
3/4	<b>108</b> - 540	<b>173</b> - 864			-----	-----

\*Bold number is allowable load, second number is average ultimate load.

## STEEL STUDS

PART NUMBER SERIES	SHANK DIAMETER (INCH)	INSTALLED IN COLD FORMED STEEL FRAMING (lbf)					
		22 Gage	20 Gage	18 Gage	16 Gage	14 Gage	12 Gage
IFS (Knurled)	0.100	<b>20</b> - 120	<b>33</b> - 200	<b>46</b> - 280	<b>60</b> - 360	<b>62</b> - 371	<b>75</b> - 448

\*Bold number is allowable load, second number is average ultimate load.

## WOOD

PART NUMBER SERIES	SHANK DIAMETER (INCH)	INSTALLED IN 15/32" (1/2 NOMINAL) 4 PLY PLYWOOD SHEATHING (lbf)
IFS (Knurled)	0.100	<b>16</b> - 93

\*Bold number is allowable load, second number is average ultimate load.

## Add this specification to the project...

Specification: CSI Division 07-Thermal and moisture protection insulation shall be mechanically fastened to the building substrate or component with Ramset-I-F Thermal-Break insulation fasteners from ITW Ramset, Glendale Heights, IL.

### Evaluations:

ICC-ESR-1955  
 ASTM E331 (Water Penetration)  
 ASTM 2.78 (Air Leakage)  
 ASTM 84 (Surface Burning Characteristics)

### Fastener Specifications:

- Pin Material: Heat treated carbon steel
- Pin Finish: Mechanical Zinc Plated
- Washer Material: High Density Polyethylene (HDPE)
- Pin Diameter: 0.125
- 2-3/8" Holding Diameter
- The fastener assembly is clearly branded Ramset along with the length of the fastener assembly