

HARDY FRAMES ^{Inc.}

A MiTek Company

The Original Steel Shear Wall System



HARDY  FRAME
THE ORIGINAL

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The Hardy Frame® Company

Hardy Frames, Inc. manufactures and markets the revolutionary **Hardy Frame®** shear wall system. The **Hardy Frame®** is a state of the art pre-fabricated shear panel that is designed and tested to resist lateral forces resulting from high wind and earthquake loads. The system allows the building designer to meet and exceed the most stringent Shear and Braced Wall requirements.

The **Hardy Frame®** shear wall system was conceived and developed by Gary L. Hardy, a licensed General Contractor with over 25 years of experience. Gary's initial vision was to develop a shear panel that would simplify and improve the specification and construction process of shear wall panels. After years of extensive research & development, and a rigorous static and cyclic testing program, the **Hardy Frame®** was officially introduced for full production and use in 1996.

Hardy Frames, Inc. has always been the leader in the pre-fabricated shear wall industry. In fact, the **Hardy Frame®** shear wall system was the first code approved pre-fabricated shear wall panel on the market, the first to be recognized by ICBO-ES and LA City, and the first to gain approval for multi-story applications. Today, the **Hardy Frame®** is the first pre-fabricated shear panel that is recognized by the three major building codes: UBC, IBC, and IRC.

In March of 2001, Hardy Frames, Inc. became an affiliate of MiTek Industries, Inc., and in July of that year we became part of the group headed by Warren Buffett's Berkshire Hathaway Inc. By combining our talents with MiTek's engineering and software expertise and resources, we have been able to expand and grow by continuing to offer and develop the best products and services for our customers.

Our mission is simply to provide the safest and most cost effective solutions to all of the shear and braced wall challenges facing the building industry. We strive to accomplish this by adopting a process of constant improvement – continuously seeking ways to improve our operations, our products, and our services.

All of the **Hardy Frame®** products are available through local lumber yards and hardware stores. Please give us a call at 800-754-3030 today to find out how the **Hardy Frame®** shear wall system is the perfect solution to your shear and braced wall needs.

For more information, please visit our website at www.hardyframe.com

Hardy Frame® Product Listing

Depth	Width	Model	Height	Weight
3-1/2"	12"	HF78x12 7/8	78"	69
		HF8x12 7/8	92-1/4"	80
		HF9x12 7/8	104-1/4"	90
		HF10x12 7/8	116-1/4"	100

"S" Series	Height	Weight
NA		
HF8x12 7/8 S	96-5/8"	84
HF9x12 7/8 S	108-5/8"	94
HF10x12 7/8 S	120-5/8"	104

"H" Series	Height	Weight
NA		
NA		
NA		
NA		

3-1/2"	18"	HF78x18 7/8	78"	93
		HF78x18 1-1/8	78"	93
		HF8x18 7/8	92-1/4"	105
		HF8x18 1-1/8	92-1/4"	105
		HF9x18 7/8	104-1/4"	116
		HF9x18 1-1/8	104-1/4"	116
		HF10x18 7/8	116-1/4"	127
		HF10x18 1-1/8	116-1/4"	127
		HF11x18 7/8	128-1/4"	138
		HF11x18 1-1/8	128-1/4"	138
		HF12x18 7/8	140-1/4"	149
		HF12x18 1-1/8	140-1/4"	149
		HF13x18 7/8	152-1/4"	160
		HF13x18 1-1/8	152-1/4"	160

NA		
NA		
HF8x18 7/8 S	96-5/8"	109
HF8x18 1-1/8 S	96-5/8"	109
HF9x18 7/8 S	108-5/8"	120
HF9x18 1-1/8 S	108-5/8"	120
HF10x18 7/8 S	120-5/8"	131
HF10x18 1-1/8 S	120-5/8"	131
HF11x18 7/8 S	132-5/8"	142
HF11x18 1-1/8 S	132-5/8"	142
HF12x18 7/8 S	144-5/8"	153
HF12x18 1-1/8 S	144-5/8"	153
HF13x18 7/8 S	156-5/8"	164
HF13x18 1-1/8 S	156-5/8"	164

NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		

3-1/2"	24"	HF78x24 7/8	78"	128
		HF78x24 1 1/8	78"	128
		HF8x24 7/8	92-1/4"	146
		HF8x24 1-1/8	92-1/4"	146
		HF9x24 7/8	104-1/4"	162
		HF9x24 1-1/8	104-1/4"	162
		HF10x24 7/8	116-1/4"	178
		HF10x24 1-1/8	116-1/4"	178
		HF11x24 7/8	128-1/4"	194
		HF11x24 1-1/8	128-1/4"	194
		HF12x24 7/8	140-1/4"	210
		HF12x24 1-1/8	140-1/4"	210
		HF13x24 7/8	152-1/4"	226
		HF13x24 1-1/8	152-1/4"	226

NA		
NA		
HF8x24 7/8 S	96-5/8"	152
HF8x24 1-1/8 S	96-5/8"	152
HF9x24 7/8 S	108-5/8"	168
HF9x24 1-1/8 S	108-5/8"	168
HF10x24 7/8 S	120-5/8"	184
HF10x24 1-1/8 S	120-5/8"	184
HF11x24 7/8 S	132-5/8"	200
HF11x24 1-1/8 S	132-5/8"	200
HF12x24 7/8 S	144-5/8"	216
HF12x24 1-1/8 S	144-5/8"	216
HF13x24 7/8 S	156-5/8"	232
HF13x24 1-1/8 S	156-5/8"	232

NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		
NA		

3-1/2"	32"	HF8x32	92-1/4"	101
		HF9x32	104-1/4"	113
		HF10x32	116-1/4"	125

HF8x32 S	96-5/8"	105
HF9x32 S	108-5/8"	117
HF10x32 S	120-5/8"	129

HF8x32 H	92-1/4"	136
HF9x32 H	104-1/4"	153
HF10x32 H	116-1/4"	170

3-1/2"	48"	HF8x48	92-1/4"	116
		HF9x48	104-1/4"	128
		HF10x48	116-1/4"	140
		HF11x48	128-1/4"	152

HF8x48 S	96-5/8"	120
HF9x48 S	108-5/8"	132
HF10x48 S	120-5/8"	147
HF11x48 S	132-5/8"	159

HF8x48 H	92-1/4"	156
HF9x48 H	104-1/4"	173
HF10x48 H	116-1/4"	190
NA		

3-1/2"	64"	HF8x64	92-1/4"	131
		HF9x64	104-1/4"	143
		HF10x64	116-1/4"	155
		HF11x64	128-1/4"	167
		HF12x64	140-1/4"	179
		HF13x64	152-1/4"	191

HF8x64 S	96-5/8"	134
HF9x64 S	108-5/8"	147
HF10x64 S	120-5/8"	159
HF11x64 S	132-5/8"	171
HF12x64 S	144-5/8"	183
HF13x64 S	156-5/8"	195

HF8x64 H	92-1/4"	176
HF9x64 H	104-1/4"	193
HF10x64 H	116-1/4"	210
NA		
NA		
NA		

3-1/2"	80"	HF8x80	92-1/4"	146
		HF9x80	104-1/4"	156
		HF10x80	116-1/4"	170
		HF11x80	128-1/4"	182
		HF12x80	140-1/4"	194
		HF13x80	152-1/4"	206

HF8x80 S	96-5/8"	150
HF9x80 S	108-5/8"	162
HF10x80 S	120-5/8"	174
HF11x80 S	132-5/8"	186
HF12x80 S	144-5/8"	198
HF13x80 S	156-5/8"	210

HF8x80 H	92-1/4"	196
HF9x80 H	104-1/4"	213
HF10x80 H	116-1/4"	230
NA		
NA		
NA		

3-1/2"	Posts	3 1/2"	Posts	HFP8	92-1/4"	31
				HFP9	104-1/4"	35
				HFP10	116-1/4"	39
				HFP11	128-1/4"	43
				HFP12	140-1/4"	47
				HFP13	152-1/4"	51

HFP8 S	96-5/8"	33
HFP9 S	108-5/8"	37
HFP10 S	120-5/8"	41
HFP11 S	132-5/8"	45
HFP12 S	144-5/8"	49
HFP13 S	156-5/8"	53

HFP8 H	92-1/4"	42
HFP9 H	104-1/4"	47
HFP10 H	116-1/4"	52
HFP11 H	128-1/4"	57
HFP12 H	140-1/4"	62
HFP13 H	152-1/4"	67

ACCESSORIES

Single Use Templates	Weight	Reusable Templates	Weight	CMU Templates	Weight	Double Template	Weight
HFT 4	0.2	NA		NA		NA	
HFT12 7/8	0.5	RHFT12 7/8	1.6	HFT-CMU12 7/8	1.0	HFDT 12 7/8	2.2
HFT18 7/8	0.9	RHFT18 7/8	2.7	HFT-CMU18 7/8	1.4	HFDT 18 7/8	2.8
HFT18 1-1/8	0.9	RHFT18 1-1/8	2.7	HFT-CMU18 1-1/8	1.4	HFDT 18 1-1/8	2.8
HFT24 7/8	1.1	RHFT24 7/8	3.5	HFT-CMU24 7/8	1.9	HFDT 24 7/8	3.8
HFT24 1-1/8	1.1	RHFT24 1-1/8	3.5	HFT-CMU24 1-1/8	1.9	HFDT 24 1-1/8	3.8
HFT32	1.5	RHFT32	4.8	HFT-CMU32	2.6	HFDT 32	5.1
HFT48	2.3	RHFT48	7.2	HFT-CMU48	3.9	HFDT 48	7.0
HFT64	3.1	RHFT64	9.2	HFT-CMU64	5.2	HFDT 64	8.5
HFT80	3.8	RHFT80	12.2	HFT-CMU80	6.5	HFDT 80	10.4
Bearing Plates	Weight	Bolt Brace	Weight	Template Kits	Weight	Deck Imbed	Weight
HFBP12 7/8 (Length = 18")	12.3	HFBB5	0.2	NA		NA	
HFBP18 7/8 (Length = 24")	16.7	HFBB12	0.4	HFTK12 7/8	13	HFDEK 12 7/8	9
HFBP18 1-1/8 (Length = 24")	16.7	HFBB18	0.6	HFTK18 7/8	14	HFDEK 18 7/8	10
HFBP24 7/8 (Length = 30")	20.7	HFBB24	0.8	HFTK18 1-1/8	29	HFDEK 18 1-1/8	15
HFBP24 1-1/8 (Length = 30")	20.7	HFTR	3.6	HFTK24 7/8	17	HFDEK 24 7/8	12
				HFTK24 1-1/8	31	HFDEK 24 1-1/8	16
Saddles	Weight	Base Extension	Weight				
HFS24	2.9	HFBX	1.8	HFTK32	18	HFDEK 32	17
HFS36	4.1	Reducer	Weight	HFTK48	21	HFDEK 48	23
Plate Washer	Weight	HFR	0.2	HFTK64	21	HFDEK 64	27
HFPW 7/8 or 1-1/8	1.0	Deep Socket	Weight	HFTK80	23	HFDEK 80	33
Base Extension	Weight	HFDS 7/8	1.8	Bolt Lever	Weight	Nut Retainer	Weight
HFBX	1.8	HFDS 1-1/8	2.7	HFBL	21.0	HFNR	0.3

Weights are in lbs.

General Information

Code Evaluations:

All **Hardy Frame**[®] structural products in this catalog have been evaluated by the following code authorities:

ICC Evaluation Service, Inc.: ICC-ES Legacy Report PFC- 5342 for 1997 UBC, 2000 IBC and 2000 IRC

The City of Los Angeles, California: Research Report - RR 25391

The Division of State Architect, California, DSA per Product Acceptance Report PA-106

Florida Statewide Product Approval #FL4521

Product Use:

The **Hardy Frame**[®] products are designed and manufactured for the specific purposes described in this catalog. Any changes to the products or in the installation procedures must be approved by the engineer of record and are the sole responsibility of the designer.

Quality Statement:

Hardy Frames, Inc. warrants to its customers that its products are free from material defects of manufacture or design, and will perform in substantial accordance with published specifications, if properly used.

Testing:

Hardy Frames, Inc. performs extensive testing on all of the **Hardy Frame**[®] structurally rated products. All cyclic testing is done in accordance with SEAOSC's (SPD) and CUREE loading protocols. All final testing is conducted by a third party testing laboratory.

Material:

Hardy Frame[®] Panels, Brace Frames and Posts are manufactured from prime quality steel which meets the requirements of ASTM A 653 SS Grade 50 steel with ASTM A 36 hot-rolled steel built in at hold down connections.

Finish:

All galvanized products have a G60 hot-dipped galvanized zinc coating.

Threaded Rods and Bolts:

Unless otherwise noted, all threaded rods and plate washers must conform to ASTM A 36. All anchor bolts and lag bolts must conform to ASTM A 307.

Notes to the Specifier:

- The allowable loads shown in this catalog are based on Allowable Stress Design methodology.
- The published allowable design loads for the **Hardy Frame**[®] Panels and Brace Frames are based on calculations and are verified by static and/or cyclic testing.
- For the **Hardy Frame**[®] Panels and Brace Frames, the allowable design loads may change by the type of support below. Please be sure to refer to the proper table and installation details for accurate load values and proper installation.
- For support conditions different than those described in the table notes, use procedure 1 for Panels and procedure 2 for Brace Frames.
- Please be clear as to the surface you want the **Hardy Frame**[®] Panel or Brace Frame to be installed on i.e.: on concrete, mudsill, etc.
- The allowable load design values for the **Hardy Frame**[®] Panels and Brace Frames shown in these tables are for UBC-97. For IBC and IRC building codes use the conversion procedure shown in the footnotes of each table.

Notes to the Framers:

- Install all specified fasteners in accordance to the instruction of this catalog.
- When necessary, all field welding should be done in accordance with A.W.S. standards. **WARNING:** Welding galvanized steel may produce harmful fumes and should be performed in well-ventilated environments. Follow proper welding procedures and safety precautions.
- Washers should always be used under the head or nut of a bolt.
- Please refer to the proper installation specifications and details as provided in the plans.

General Notes:

- Hardy Frames, Inc. reserves the right to change specifications, designs, and models without notice and liability of such changes.
- The information presented in this catalog supercedes all information published in previous documents and publications.
- This catalog is designed as a general reference for the **Hardy Frame**[®] products. For more specific and most up to date information, please visit our website at www.hardyframe.com or contact us directly at 800-754-3030.
- For installations involving unusual or extreme applications and conditions, please contact Hardy Frames, Inc. at 800-754-3030.
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At Hardy Frames, Inc. pre-manufactured shear walls are our core business. From the beginning, customer service



has been a top priority. Because we are focused on shear walls and have a strong commitment to service, we can provide you with the best support in the industry.

To the **Design Professional** this means prompt and correct technical answers and full design solutions that are backed by extensive testing and research. From providing allowable design loads to addressing specific repairs you can always count on our answers.

To the **Building Official**, our Code Reports and Typical Installation Details will make the plan check process and field inspection easier.

To the **Installer**, our background and knowledge in framing and construction allows us to communicate with the field and have an understanding of the installation from the point of view of the installer. Quick responses are a must and project delays are avoided at all costs. Help is available by telephone, or by one of our many field representatives with real field experience.

To **all parties**, in addition to literature, details and telephone support, our company provides jobsite visits, seminars, and personal training sessions. We respond to our customers and you can rest assured that we will be there for you when you need us.

How can we help you today?