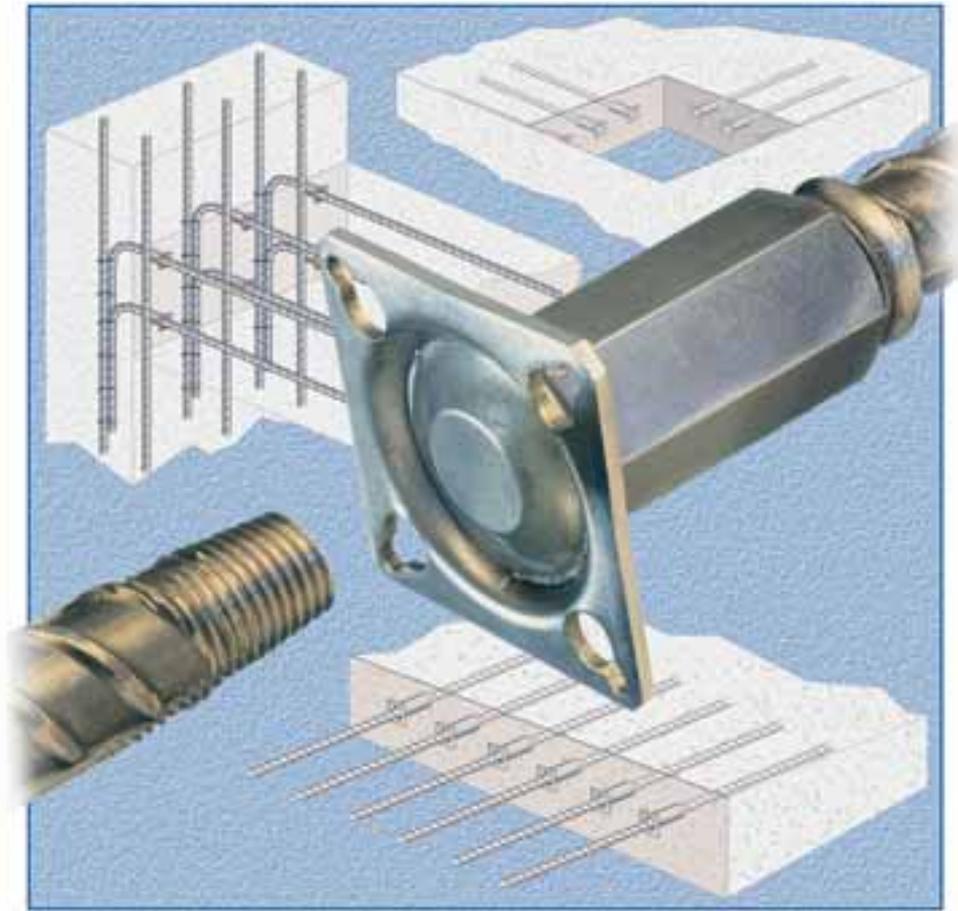


LENTON[®]

LENTON[®] FORM SAVER

Mechanical Rebar Splicing System



ERICO[®]

Dowel bars, the reinforcing steel that protrudes through formwork, have been the traditional method for joining bars in segmental pours. In recent years, many contractors and construction product suppliers have discovered that dowel bar substitutes can improve their schedules and bottom line by eliminating costly form repair and cleaning. LENTON® FORM SAVER - the most efficient dowel bar substitute on the market today.

Dowel Bar vs

Which method makes more sense when it comes to

Dowel Bar Problems



Exposed dowels on the job site are a hazard. In addition, they can be bent or damaged.



There are a number of mechanical dowel bar substitutes on the market today, but there's only one with the LENTON® Tapered Thread.

Drilling forms for dowels is expensive, and form removal is difficult and time consuming.

- Prevents slip forming
- Protruding dowel bars cause safety hazards
- Makes form removal difficult and time consuming
- Damages costly formwork
- Can be exposed to damage (broken or bent)

L LENTON® FORM SAVER

value, productivity and safety?

LENTON® FORM SAVER Solutions

BEFORE CONCRETE POUR



Instead of drilling, simply nail the LENTON® FORM SAVER onto the form.

- Allows for easier slip, gang and jump forming
- Eliminates potential on-site safety hazards
- Eliminates drilling of expensive formwork
- Maintains rebar continuity independent of concrete cover
- Protects valuable forms by allowing stripping, cleaning and recycling of forms in less time
- Provides greater structural integrity
- Exceeds Type 2 splice requirements and other international building-code requirements

AFTER CONCRETE POUR



The form removal is quick and the protective metal disc is easily removed with a screwdriver.



With the disc removed, the clean internal threads are exposed.



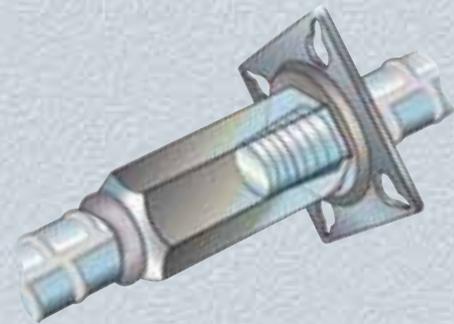
The male end of the rebar is easily installed into the threaded coupler.



With a few quick turns, the rebar is locked in place.

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The LENTON® FORM SAVER is manufactured with our patented LENTON taper threads:

- Positive lock, no-slip connection provides strength, consistency and reliability
- Eliminates cross-threading problems and job-site delays
- Requires 4½ turns for complete installation
- Manufactured using an ISO 9001-2000 registered quality system
- Self-aligning

Project References

From simple commercial buildings to complex structures, the LENTON® FORM SAVER system is used in a wide variety of projects.

Partial List:

20th Century Tower	Kansas City, MO
Adelphia Coliseum	Nashville, TN
Bally's Casino Parking Garage	Atlantic City, NJ
Central Artery	Boston, MA
Caesars Palace Parking Structure	Las Vegas, NV
Chesapeake Bay Bridge	Annapolis, MD
Cleveland Browns Stadium	Cleveland, OH
Dallas-Fort Worth Airport Parking Garage	Ft. Worth, TX
FAA Control Tower	Denver, CO
Florida Panthers Arena	Sunrise, FL
Hard Rock Hotel & Casino	Ft. Lauderdale, FL
I44 Bridge Canadian River	Oklahoma City, OK
Imperial Palace Casino	Biloxi, MS
Intel	Hillsboro, OR
Island Tower Condo	Pensacola, FL
Jacobs Field	Cleveland, OH
LA Subway Station	North Hollywood, CA
Madison Financial	Seattle, WA
Micron	Salt Lake City, UT
Motorola	Austin, TX
Ohio Stadium - Ohio State University	Columbus, OH
Paris Hotel and Parking Structure	Las Vegas, NV
Portland Air Traffic Control Tower	Portland, OR
Portland Tunnel	Portland, OR
Salt Lake City Air Traffic Control Tower	Salt Lake City, UT
Scott Air Force Base	Bellevill, IL
SF Bay Bridge	San Francisco, CA
SF Courthouse	San Francisco, CA
SF International Airport	San Francisco, CA
St. Louis ATCT	St. Louis, MO
Turnberry Condominiums	Las Vegas, NV
WWII Memorial	Washington DC

LENTON® FORM SAVER

The easiest, most efficient dowel on the market today

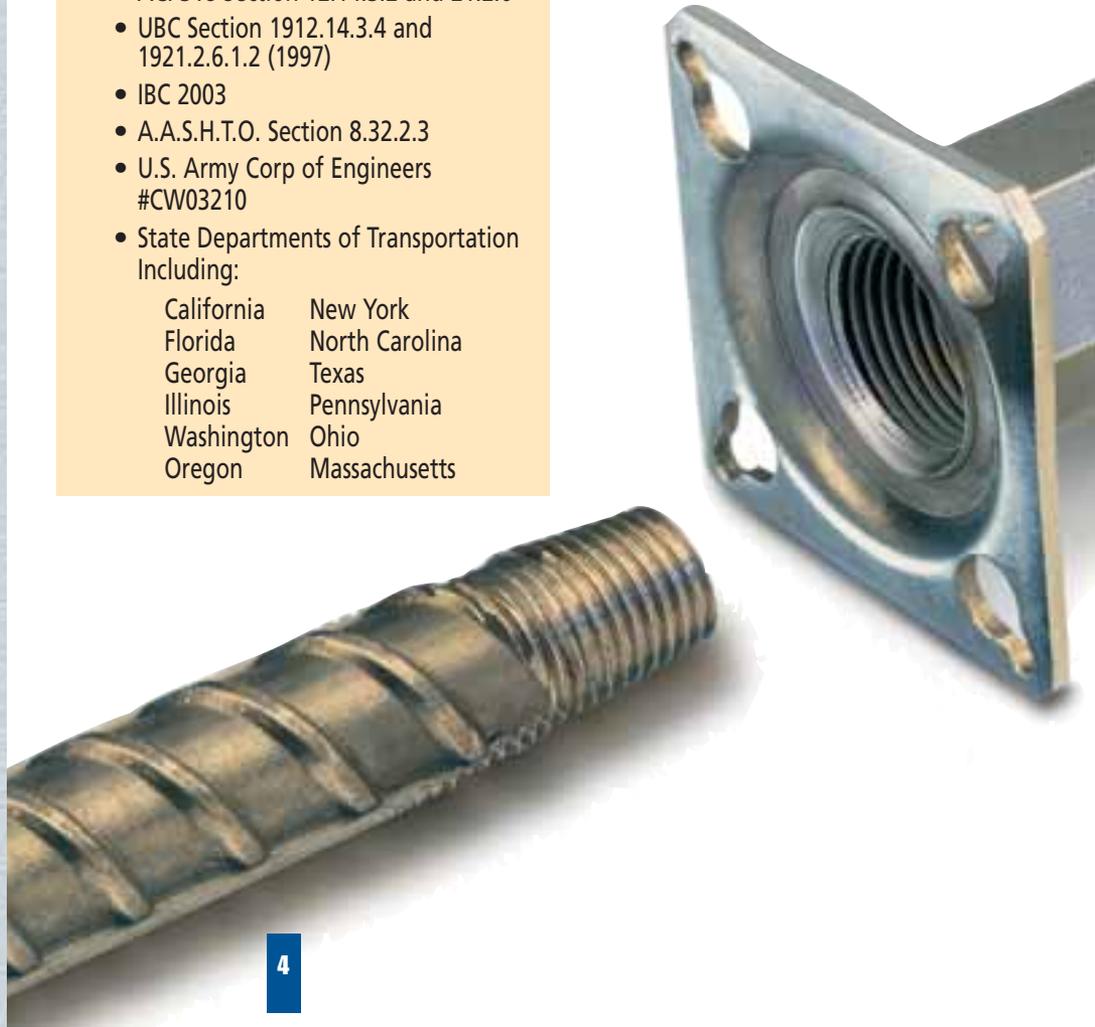
LENTON® FORM SAVER dowel bar assemblies provide continuity and structural integrity to reinforced concrete construction in segmental pour applications. The LENTON FORM SAVER is designed with our unique LENTON tapered thread system, factory installed thread protectors, and durable mounting plates for easy attachment to forms. The taper threaded design, like the complete family of LENTON couplers, provides load path continuity in tension, compression and stress reversal applications.

LENTON FORM SAVER mechanical splices provide superior performance well beyond the yield strength of the reinforcing bar. In fact, LENTON FORM SAVERS exceed the requirements for Type 1 and Type 2, and are recognized under ICBO report ER3967.

FORM SAVER is recognized by or meets the standards of:

- ICBO-ES Report #3967
- ACI 318 Section 12.14.3.2 and 21.2.6
- UBC Section 1912.14.3.4 and 1921.2.6.1.2 (1997)
- IBC 2003
- A.A.S.H.T.O. Section 8.32.2.3
- U.S. Army Corp of Engineers #CW03210
- State Departments of Transportation Including:

California	New York
Florida	North Carolina
Georgia	Texas
Illinois	Pennsylvania
Washington	Ohio
Oregon	Massachusetts



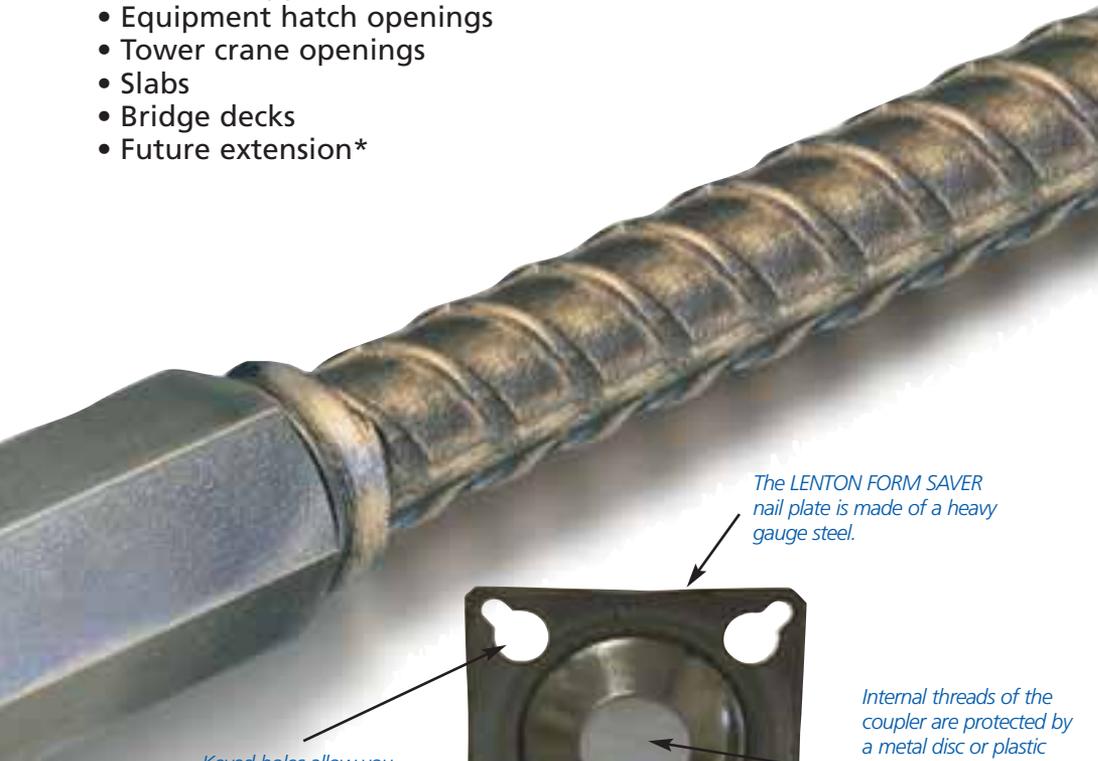
bar substitute

LENTON® FORM SAVER Benefits:

LENTON FORM SAVER splices outperform dowel bars because of their ability to develop strength requirements independent of concrete cover. Their ease of installation, consistent performance, and durability add value and integrity to your structure.

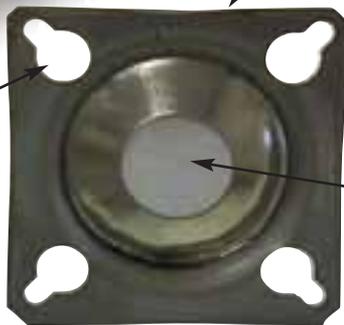
LENTON® FORM SAVERS are ideal for:

- Slip and jump forming
- Segmental pours
- Stairwell applications
- Equipment hatch openings
- Tower crane openings
- Slabs
- Bridge decks
- Future extension*



The LENTON FORM SAVER nail plate is made of a heavy gauge steel.

Keyed holes allow you to first drive a nail into your form to hang the assembly. Remaining nails may then be driven providing quick and easy installation.



Internal threads of the coupler are protected by a metal disc or plastic plug pressed into the nail plate. After the forms are removed, this disc can be knocked out exposing the contamination-free internal threads.

Nail Plate Dimensions:	
#4 - #8	2-1/4" x 2-1/4"
#9 - #11	2-1/2" x 2-1/2"



Clipped flange or double clipped flange available (epoxy shown) for concrete cover concerns (sizes #4-7).



LENTON FORM SAVER is also available in epoxy and hot-dipped galvanized finishes.

Specifications:

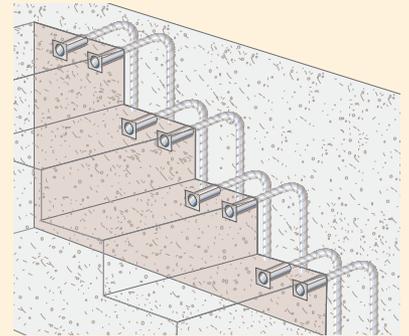
Epoxy: ASTM A775

Hot Dipped Galvanized: ASTM A767**

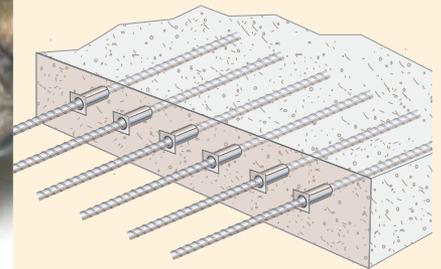
* For "long-term" protection, ERICO recommends our plastic taper threaded plugs.

**Contact ERICO for availability of hot dip galvanized.

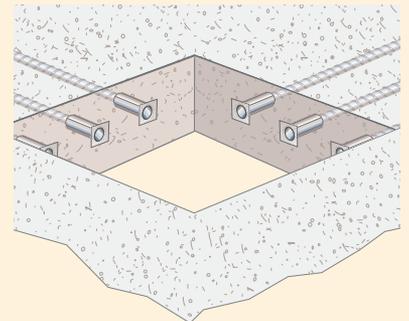
APPLICATIONS



Stairwell

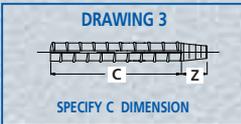
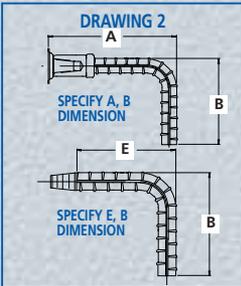
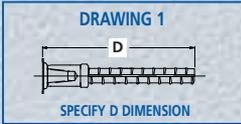


Highway/Bridge Slabs

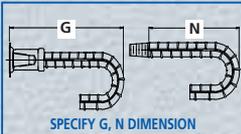
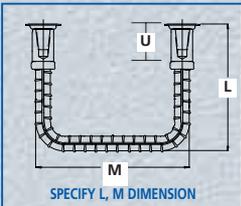
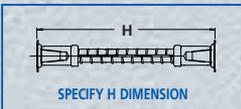


Equipment and Crane Openings

LENTON® FORM SAVERS



Other configurations available as shown. Contact ERICO.



LENTON® FORM SAVER Product Line

LENTON FORM SAVER is available in sizes #4 - #11 (Metric sizes-12 mm through 36 mm) factory standard sizes (lengths) or in custom lengths. Unique bend configurations are also available. When ordering, please inquire about size availability per line item. LENTON FORM SAVER is available nationwide through our network of remote manufacturing centers, assuring prompt delivery.

How to Order by Part Number

FS	SIZE	STYLE	LENGTH	X	LENGTH	E
						Epoxy - (optional) In Inches of "B" - (optional)
						Indicates Bent Rebar - (optional)
						In Inches of "A", "C" or "D"
						F indicates Coupler/Rebar M Indicates Threaded Rebar (other styles available upon request)
						Rebar Size
						Attached Nailer Plate FORM SAVER

EXAMPLE:

FS4F20	#4 Coupler/Rebar with "D"
	Length of "20" (see drawing 1)
FS5F6X10	#5 Coupler/Rebar with "A"
	Length of "6" with "B"
	Length of "10" (see drawing 2)
FS7M36	#7 Threaded/Rebar with "C"
	Length of "36" (see drawing 3)

LENTON® FORM SAVER

ASTM in-lb	REBAR DESIGNATION			TAPER THREADED REBAR (Male) ¹		COUPLER/REBAR ASSEMBLY (Female) ²	
	Metric (mm)	Canada	Soft Metric	PART NO.	LENGTH "C" (in) mm	PART NO.	LENGTH "D" (in) mm
4	12 mm	10M	13	FS4M24 FS4M36	24 610 36 914	FS4F20 FS4F24	20 508 24 610
5	16 mm	15M	16	FS5M24 FS5M30 FS5M36	24 610 30 762 36 914	FS5F24 FS5F30 FS5F36	24 610 30 762 36 914
6	20 mm	20M	19	FS6M36	36 914	FS6F24 FS6F36	24 610 36 914
7	22 mm	—	22	FS7M36 FS7M48	36 914 48 1219	FS7F36	36 914
8	25 mm	25M	25	FS8M48	48 1219	FS8F52	52 1321
9	28 mm	30M	29	FS9M48	48 1219	FS9F52	52 1321
10	32 mm	—	32	FS10M60	60 1524	FS10F64	64 1626
11	36 mm	35M	36	FS11M60	60 1524	FS11F64	64 1626

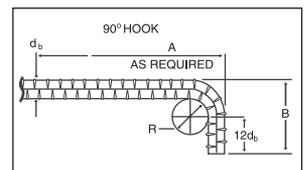
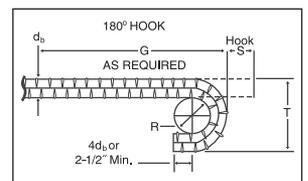
¹Includes Rebar Thread Protector.

²Includes Coupler Thread Protector.

Standard Hooks and Bends

ASTM in-lb	REBAR DESIGNATION			PIN DIAMETER	MINIMUM BEND	180° HOOKS*		90° HOOKS*		BAR ENGAGEMENT	COUPLER LENGTH
	Metric (mm)	Canada	Soft Metric	"R" (in) mm	"A" (in) mm	"S" (in) mm	"T" (in) mm	"B" (in) mm	"Z" (in) mm	"U" (in) mm	
4	12 mm	10M	13	3 76	4-1/2 114	6 152	4 102	8 203	9/16 14	1-1/2 38	
5	16 mm	15M	16	3-3/4 95	5-1/2 140	7 178	5 127	10 254	7/8 22	2 51	
6	20 mm	20M	19	4-1/2 114	6-1/2 165	8 203	6 152	12 305	1-1/8 29	2-1/2 64	
7	22 mm	—	22	5-1/4 133	7-1/4 184	10 254	7 178	14 356	1-1/4 32	2-3/4 70	
8	25 mm	25M	25	6 152	10-1/2 267	11 279	8 203	16 406	1-3/8 35	3-1/2 89	
9	28 mm	30M	29	9-1/2 241	12-1/4 311	15 381	11-3/4 298	19 483	1-1/2 38	3-3/4 95	
10	32 mm	—	32	10-3/4 273	13-3/4 349	17 432	13-1/4 337	22 559	1-9/16 40	3-15/16 100	
11	36 mm	35M	36	12 305	14-3/4 375	19 483	14-3/4 375	24 610	1-11/16 43	4-1/8 105	

*ACI 318 Chapter 7.1



LENTON® FORM SAVER Mechanical Splices

How to Order:

To order the correct LENTON® FORM SAVER mechanical splices for your construction applications, please call ERICO® toll free at 1-800-248-2677. Locations are listed on back cover.

How to Specify:

Specific: Mechanical connections shall be LENTON FORM SAVERS as manufactured by ERICO®.

Generic: The mechanical connection shall meet building code requirements of developing in tension or compression as required by local norms/codes. The mechanical connection shall be positive-locking, taper-threaded-type coupler manufactured from high quality steel. The bar ends must be taper threaded using the manufacturer's bar threading equipment to ensure proper taper and thread engagement. Bars shall be installed to the manufacturer's requirements. The couplers shall be manufactured using registered quality systems around the world.

A Look At ERICO® Concrete Reinforcement Products

ERICO has been a pioneer in the concrete construction industry for more than 40 years. We changed rebar splicing, first with CADWELD® mechanical connections, then with the LENTON® mechanical splicing system – the #1 mechanical connector in the world. ERICO now offers a wide range of mechanical splices for almost any construction need:



- **CADWELD®** – Premiere mechanical splicing system
- **LENTON® FORM SAVER** – Ideal for segmental pour
- **LENTON® INTERLOK** – Ideal for precast structures
- **LENTON® QUICK WEDGE** – Ideal for quick retrofit
- **LENTON® SPEED SLEEVE** – Ideal for compression situations
- **LENTON® TERMINATOR** – Ideal alternative to hooked rebar anchorage

The entire ERICO line of mechanical rebar splices has replaced many conventional splicing systems, such as welding and lap splicing. Unlike butt welding, ERICO products require no special training or external power source, are quicker to install and inspect, reduce crane time, improve the tensile strength of the splice and can be installed in any weather.

As your rebar splicing specialist, ERICO offers you the expertise you need for all your rebar splicing projects.

WARNING

ERICO products shall be used only as illustrated and recommended in the product instruction sheets (additional instruction sheets are available at www.erico.com). Misuse or misapplication may cause failure resulting in possible property damage or bodily injury.

WARRANTY; CLAIMS; EXCLUSIVE REMEDY

ERICO products are warranted to be free from defects in material and workmanship at the time of shipment. NO OTHER WARRANTY, WHETHER EXPRESS OR IMPLIED (INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE), SHALL EXIST IN CONNECTION WITH THE SALE OR USE OF ANY ERICO PRODUCTS. Claims for errors, shortages, defects or nonconformities ascertainable upon inspection must be made in writing within 5 days after the Buyer's receipt of products. All other claims must be made in writing to ERICO within 6 months from the date of shipment or transport. Products claimed nonconforming or defective must, upon ERICO's prior written approval in accordance with its standard terms and procedures governing returns, promptly be returned to ERICO for inspection. Claims not made as provided above and within the applicable time period will be barred. ERICO shall in no event be responsible if the products have not been stored or used in accordance with its specifications and recommended procedures. ERICO will, at its option, either repair or replace nonconforming or defective products for which it is responsible or return the purchase price to Buyer. THE FOREGOING STATES BUYER'S EXCLUSIVE REMEDY FOR ANY BREACH OF ERICO WARRANTY AND FOR ANY CLAIM, WHETHER SOUNDING IN CONTRACT, TORT OR NEGLIGENCE, FOR LOSS OR INJURY CAUSED BY THE SALE OR USE OF ANY PRODUCT.

LIMITATION OF LIABILITY

ERICO excludes all liability except that is directly attributable to the willful or gross negligence of ERICO's employees. Should ERICO be held liable its liability shall in no event exceed the total purchase price under the contract. ERICO SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS OF BUSINESS OR PROFITS, DOWNTIME OR DELAY, LABOR, REPAIR OR MATERIAL COSTS OR ANY SIMILAR OR DISSIMILAR CONSEQUENTIAL LOSS OR DAMAGE INCURRED BY BUYER.

Call ERICO Toll-Free at 1-800-248-2677
or fax 1-800-462-4712 for technical
specifications and additional information.



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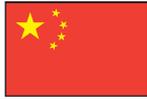


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