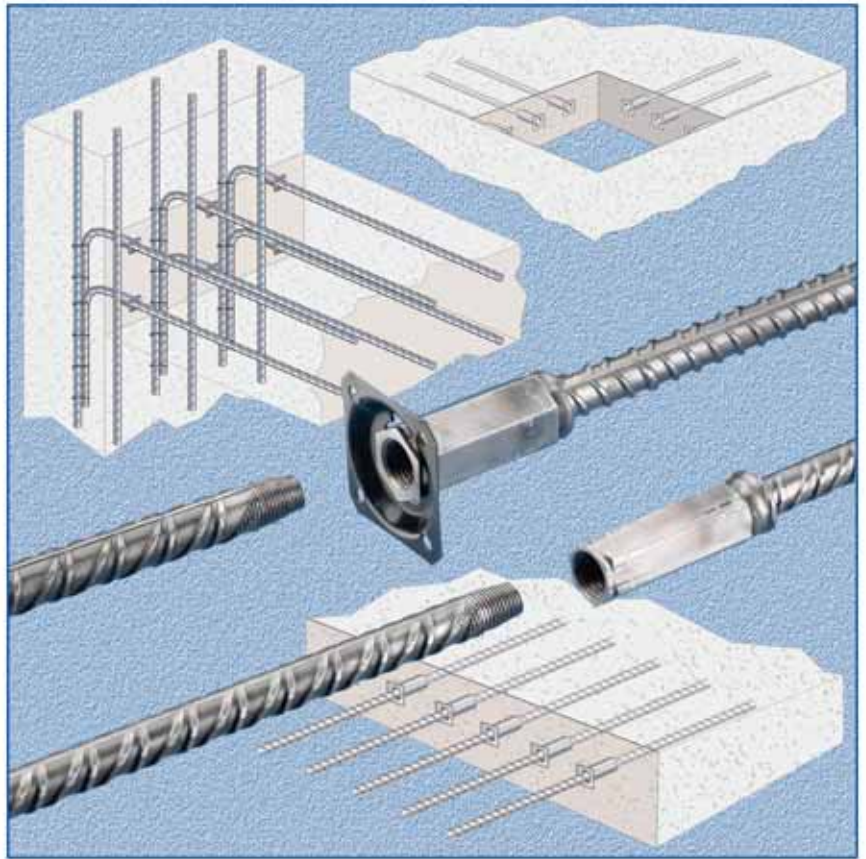


LENTON®

LENTON® FORM SAVER

Taper Threaded Starterbar System

For Europe, Middle East and Africa



ERICO®

Dowel bars, the reinforcing steel that protrudes through formwork, has 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 is the solution!

Dowel Bar vs

How can you combine higher productivity with

LENTON® FORM SAVER Starterbar

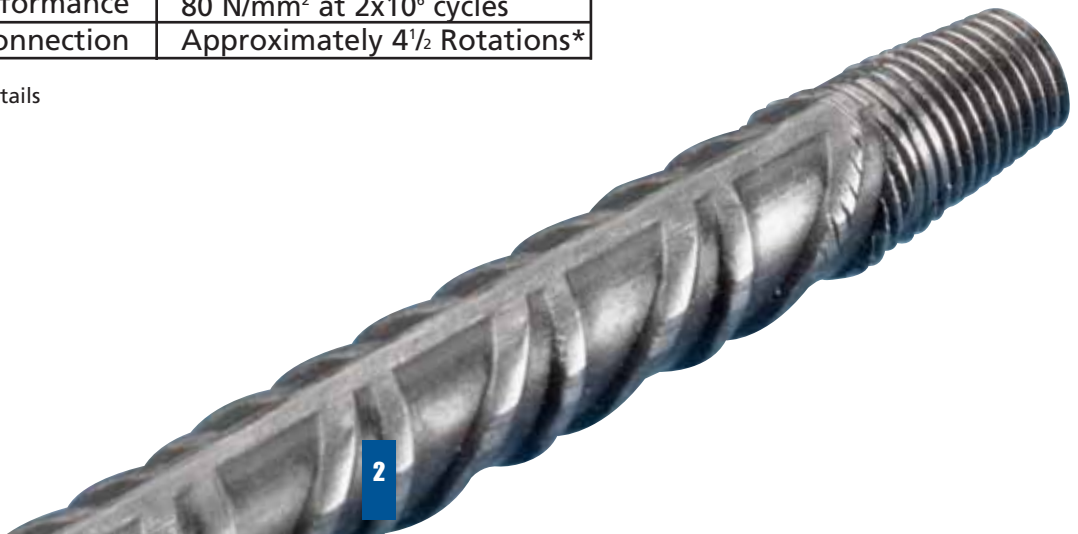
- Easy
- Efficient
- Slim
- Fast

LENTON® FORM SAVER starterbar assemblies provide continuity and structural integrity to reinforced concrete construction in segmental pour applications. The LENTON FORM SAVER is designed with the unique LENTON® tapered thread system, 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. LENTON FORM SAVERS comply with many leading approval bodies and hold various approvals.

LENTON FORM SAVER	PERFORMANCE
Tensile strength	$\geq 0,95 F_u$
Permanent Elongation	$< 0,10 \text{ mm at } 0,7 F_{yk}$
Elongation	$\geq 5\%$
Dynamic performance	$80 \text{ N/mm}^2 \text{ at } 2 \times 10^6 \text{ cycles}$
Rotations to close connection	Approximately $4\frac{1}{2}$ Rotations*

* See instruction sheet for details



L^ENTON[®] FORM SAVER

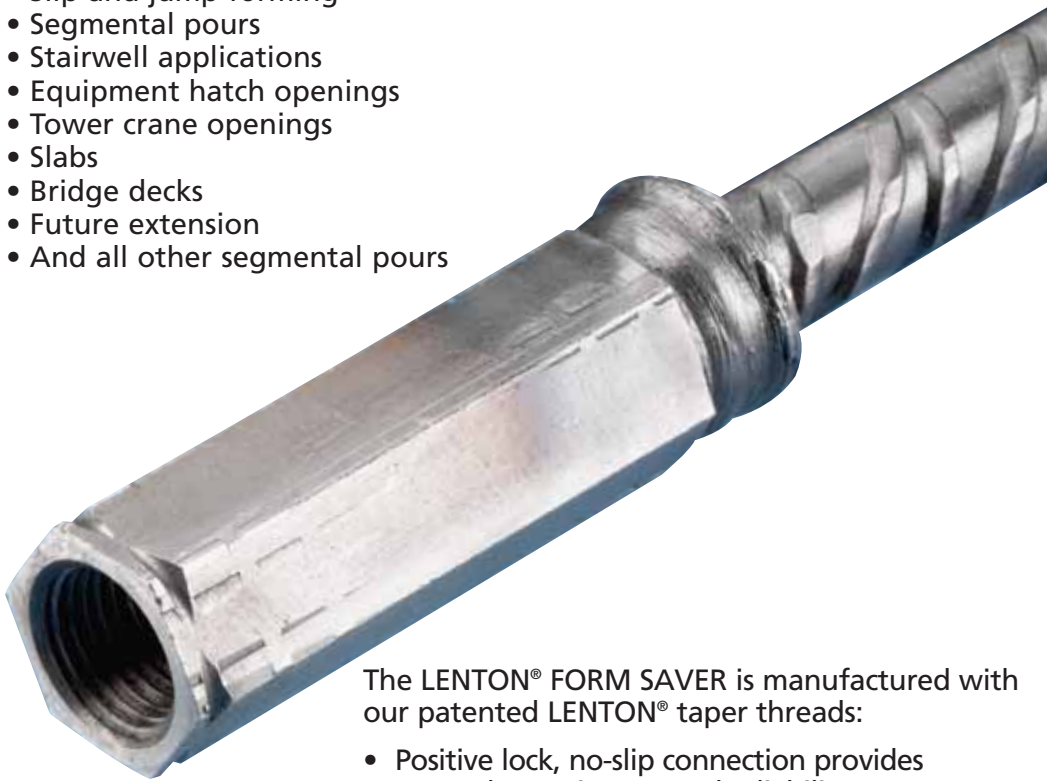
labor efficiency, economy and quality?

LENTON[®] FORM SAVER Benefits:

LENTON FORM SAVER splices outperform other systems 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 Used For:

- Slip and jump forming
- Segmental pours
- Stairwell applications
- Equipment hatch openings
- Tower crane openings
- Slabs
- Bridge decks
- Future extension
- And all other segmental pours

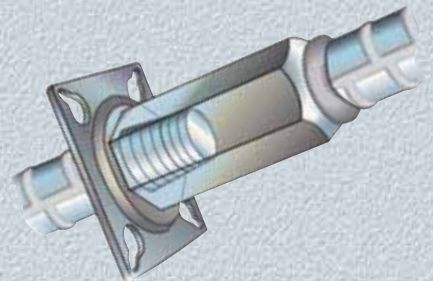


The LENTON[®] FORM SAVER is manufactured with our patented LENTON[®] taper threads:

- Positive lock, no-slip connection provides strength, consistency and reliability
- Eliminates cross-threading problems and promotes jobsite efficiency
- Approximately 4½ turns for complete installation
- Manufactured using an ISO 9001-2000 registered quality system process
- Self-aligning
- System is compatible and interchangeable with all other LENTON taper threaded systems
- Available with optional nailing plates
- Rebar quality according to ENV 10080
- Taper thread provides easy installation

Table of Contents

Dowel Bar vs. LENTON FORM SAVER	Pgs. 2-3
LENTON FORM SAVER Benefits	Pg. 3
Project References	Pg. 4
When To Use	Pg. 4
Applications	Pg. 4
Accessories	Pg. 5
Installation	Pg. 5
LENTON FORM SAVER Product Line	Pg. 6
ERICO [®] Concrete Reinforcement Products	Pg. 7
How To Order	Pg. 7



Project References

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

Partial List:

Arsenal Football Stadium
London, UK

BBC West One Office
London, UK

Daimler Chrysler
Munchen, Germany

Dallas-Fort Worth Airport Parking Garage
Ft. Worth, TX

Dansk Radio
Copenhagen, Denmark

Esso Glen Office
London

FAA Control Tower
Denver, CO

Gottaleden Tunnel
Gothenburg, Sweden

Lehrther Bahnhof
Berlin, Germany

Motorola
Austin, TX

Petuel Tunnel
Munchen, Germany

Portland Tunnel
Portland, OR

SF Bay Bridge
San Francisco, CA

Terminal 5 Airport
London Heathrow, UK

Wembley Stadium
London UK

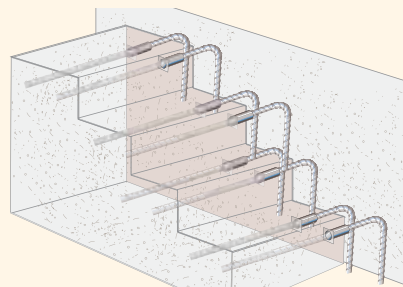
When To Use

- When protruding dowels prevent the use of certain building techniques like slip form or climbing formwork
- When protruding dowels prohibit the use of system formwork
- When protruding dowels hinder the use of steel formwork
- When protruding dowels obstruct the removal of formwork
- When the connecting rebar has a diameter between 10 and 20 mm
- When there is enough space to allow an overlap splice just behind the coupler

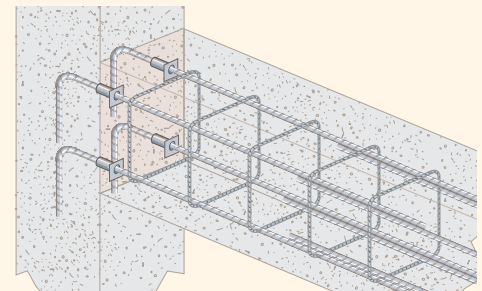


Applications

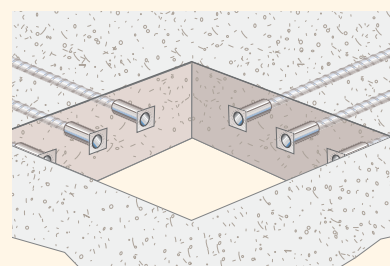
LENTON® FORM SAVER provides structural integrity between two building segments such as precast elements or with in-situ pours. It is ideal for eliminating protruding dowel bars in segmental pour applications and temporary openings. Examples include precast columns with slabs or beams, staircases to walls, and wall to wall.



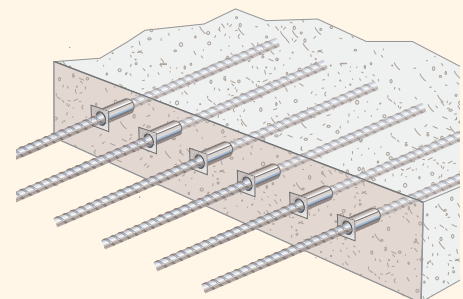
Stairwell



Columns

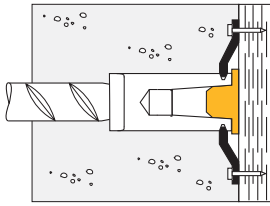


Equipment and Crane Openings



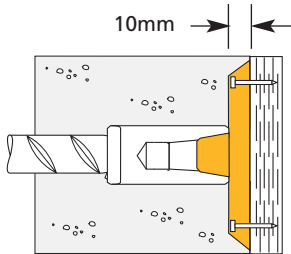
Slabs

Accessories (Order Separately)



HFF NAILING PLATE:
Steel square nailing plate. Brings the coupler mouth against the formwork. Must be combined with a closure plug type CPP.

Rebar Size	HFF	Art. no.	CPP	Art. no.	Color
10	EL-10-12-HFF	152840	EL-10-CPP	153060	Yellow
12	EL-10-12-HFF	152840	EL-12-CPP	153070	Red
14	EL-14-16-HFF	152850	EL-14-CPP	153080	Green
16	EL-14-16-HFF	152850	EL-16-CPP	153090	Black
18	EL-18-20-HFF	152860	EL-18-CPP	153100	White
20	EL-18-20-HFF	152860	EL-20-CPP	153110	Yellow



CFFP NAILING PLATE:
Keeps the coupler mouth 10 mm away from the formwork.

Rebar Size	Color	CFFP	Art. no.
10	-	n.a.	-
12	Red	EL-12-CFFP	156010
14	Green	EL-14-CFFP	156020
16	Black	EL-16-CFFP	156030
18	-	n.a.	-
20	Red	EL-20-CFFP	156050



BTP BAR-TIP PROTECTOR:
Protects the thread on the bar against pollution and provides color coding for designating the rebar size.

Rebar Size	Color	BTP	Art. no.
10	Yellow	EL-10-BTP	370000
12	Red	EL-12-BTP	370010
14	Green	EL-14-BTP	370020
16	Black	EL-16-BTP	370060
18	White	EL-18-BTP	370130
20	Yellow	EL-20-BTP	370070

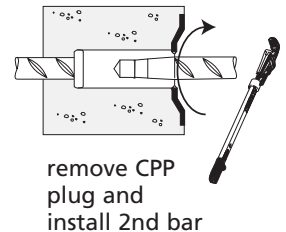
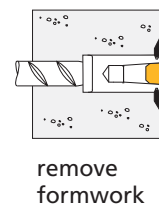
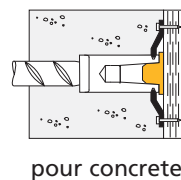
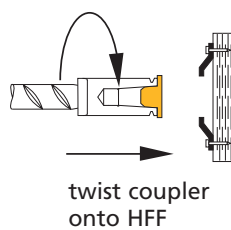
Installation

HFF Hexagonal Form Fixer

Nailing form-fixing plate for positioning of hexagonal LENTON® FORM SAVER couplers to formwork (10-20 mm)

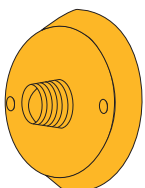


Example:

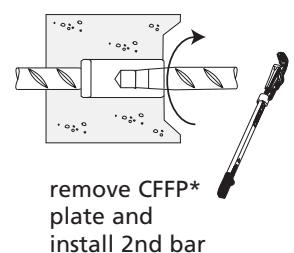
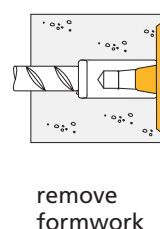
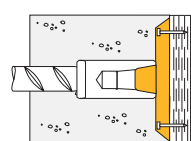
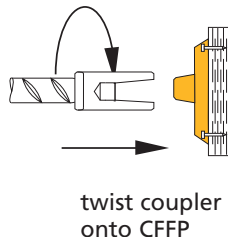


CFFP Plastic Formfixing Plate

Nailing plastic form-fixing plate for positioning LENTON® FORM SAVER couplers to formwork (10-20 mm)



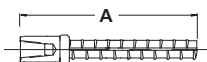
Example:



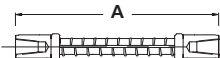
* See instruction sheet for details

L LENTON® FORM SAVERS

TYPE SA



TYPE SAA



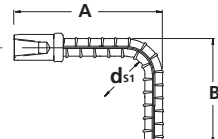
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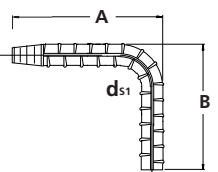
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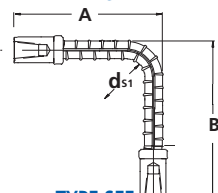
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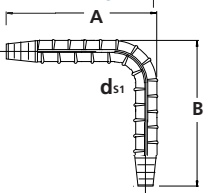
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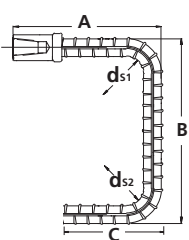
TYPE SAA



TYPE SEE



TYPE SA



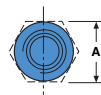
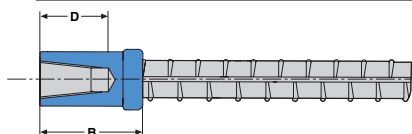
LENTON® FORM SAVER Product Line

LENTON FORM SAVER is available in sizes 10 mm through 20 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 in Europe through our network of remote manufacturing centers or our distributors, assuring prompt delivery. When ordering specify bar size, quantity, configuration and dimensions. Also specify optional accessories such as nailing plates.

LENTON FORM SAVER

Straight Length Female SA Assemblies Available in Stock in Europe

Size mm	Part No.	Art. No.	Length mm	'A'	'B'	'D'	Weight kg
10	SA10/400	152631	400	17	48	19	0.23
10	SA10/550	152632	550	17	48	19	0.29
10	SA10/700	152633	700	17	48	19	0.35
10	SA10/1000	152634	1000	17	48	19	0.46
12	SA12/400	152635	400	17	50	19	0.40
12	SA12/600	152636	600	17	50	19	0.58
12	SA12/800	152637	800	17	50	19	0.76
12	SA12/1200	152638	1200	17	50	19	1.11
16	SA16/400	152844	400	22	56	24	0.70
16	SA16/800	152646	800	22	56	24	1.34
16	SA16/1050	152647	1050	22	56	24	1.73
16	SA16/1450	152648	1450	22	56	24	2.36
20	SA20/550	152654	550	27	55	36	1.49
20	SA20/850	152655	850	27	55	36	2.23
20	SA20/1250	152656	1250	27	55	36	3.22
20	SA20/1800	152657	1800	27	55	36	4.58



Meets international standards, including BS8110, DIN1045, NFA-35-020, ACI318 and is CARES approved.

A = diameter
B = length of coupler body
D = bar engagement

Custom lengths and configurations available by special order (see figures)

Item	Type	Ø mm	Qty.	"A" mm	"B" mm	"d _{s1} " mm	"C" mm	"d _{s2} " mm	Accessories		
									HFF	CPP	CFFP
1											
2											
3											
4											
5											

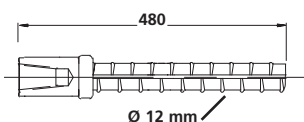
LENTON FORM SAVER is very easy to prescribe on drawings and tender documents.

The format to use is: Type Ø/size A/size B/d_{s1}/size C/d_{s2}

Enter info in sequence shown on order form above, for example:

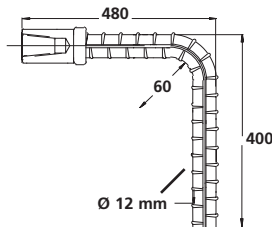
Example 1

SA12/480 equals



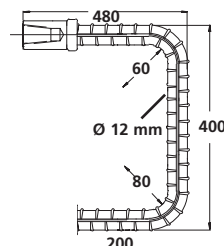
Example 2

SA12/480/400/60 equals



Example 3

SA12/480/400/60/200/80 equals



For bend configurations not shown contact ERICO® or your local LENTON® Distributor.

To Order:
This page can be photocopied and faxed to ERICO.

LENTON® FORM SAVER Mechanical Splices

How to Order:

To order the correct LENTON® FORM SAVER mechanical splices for your construction applications, please call ERICO® or your local LENTON® distributor. Locations are listed on the back cover.

How to Specify:

Specific: Mechanical connections shall be LENTON FORM SAVER Taper Thread Splices 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®** – Premier 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 installed and used only as indicated in ERICO's product instruction sheets and training materials. Instruction sheets are available at www.erico.com and from your ERICO customer service representative. Improper installation, misuse, misapplication or other failure to completely follow ERICO's instructions and warnings may cause product malfunction, property damage, serious bodily injury and death.

WARRANTY

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 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 to be 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 the 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 such liability 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.



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Alcantara 200, piso 6 Of. 17
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Fax 46-40-611-94-15



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