



EXPRESS 3

H I G H S P E E D R O L L E R G U I D E S

BIG WHEEL. BIG DEAL.

THE EXPRESS-3 ROLLER GUIDE REPRESENTS A GROUNDBREAKING COMBINATION OF ELEVATOR RIDE QUALITY, VALUE, AND EASE-OF-USE. THE CULMINATION OF A HALF-CENTURY OF ELSCO EXPERTISE IN IMPROVING RIDE QUALITY, THE 10-INCH EXPRESS-3 UTILIZES A PATENT-PENDING, SHOCK ABSORBING PIVOT BEARING TO ISOLATE THE ELEVATOR CABIN AND ITS OCCUPANTS FROM UNEVEN OR MISALIGNED RAILS. THE RESULT IS A COMPACT, LIGHT-WEIGHT ROLLER GUIDE THAT IS THE IDEAL CHOICE FOR HIGH-SPEED APPLICATIONS WHERE LOW NOISE AND A FIRST-CLASS RIDE ARE OF THE UTMOST IMPORTANCE.

FEATURES OF THE EXPRESS-3 GUIDE:

1. Ten-Inch Roller Wheels spread impacts over a larger area of the wheel arc, providing a smoother, quieter ride. The large wheel also reduces RPM, reducing the possibility of bearing noise and lengthening wheel life.

2. Innovative Elastomeric Bearings incorporate bonded rubber at the pivot point of the wheel-arm assembly. This patent-pending component eliminates nearly all metal-to-metal contact between the arms and the base, effectively isolating the elevator cabin from the noise and vibration caused by uneven or misaligned rails. The bearing also acts as a torsional spring damper, resisting the pivoting action of the arm and dissipating energy.

3. Neoprene Rubber Roller Wheels are specially compounded and rigorously tested to ensure a smooth, silent ride. Only genuine ELSCO neoprene wheels provide the damping characteristics essential to ride quality, and only genuine ELSCO wheels are engineered with high "memory" characteristics that prevent flat spots. ELSCO rollers are precision ground to within .002 inches (.051mm) "Total Indicator Reading" for perfect roundness and concentricity, then 100% inspected under stress to ensure a secure bond between tire and hub.

4. Precision Ball Bearings guarantee years of silent use. ELSCO specifies bearings intended for the high RPMs and demanding loads of electric motors – conditions far more rigorous than typically seen in elevator applications. This means that even after years of operation and tens of millions of cycles, only ELSCO roller wheels remain completely silent. Each bearing bore is machined to a tolerance of five ten-thousandths (.0005) of an inch (.0127mm), and two bearings are pressed into each wheel by a computer-driven press, ensuring perfect fit and alignment.

5. Fully Adjustable Stabilizing Springs allow the car to float between the rails, eliminating the bumps and vibrations that adversely affect ride quality.

6. Independent Adjustable Stops enable simple, precise control of the car's overall float between the rails, in both post-wise and front-to-back axes. Adjustable stops are a standard feature on the Express-3 guide.

7. Durable Structural Components. ELSCO castings are made from high-tensile-strength ductile iron and aluminum for an optimal combination of strength,

durability, and light weight. High quality guide hardware ensures long life and ease of adjustment in the field. All components are inspected and assembled to exacting standards for a lifetime of reliable performance.

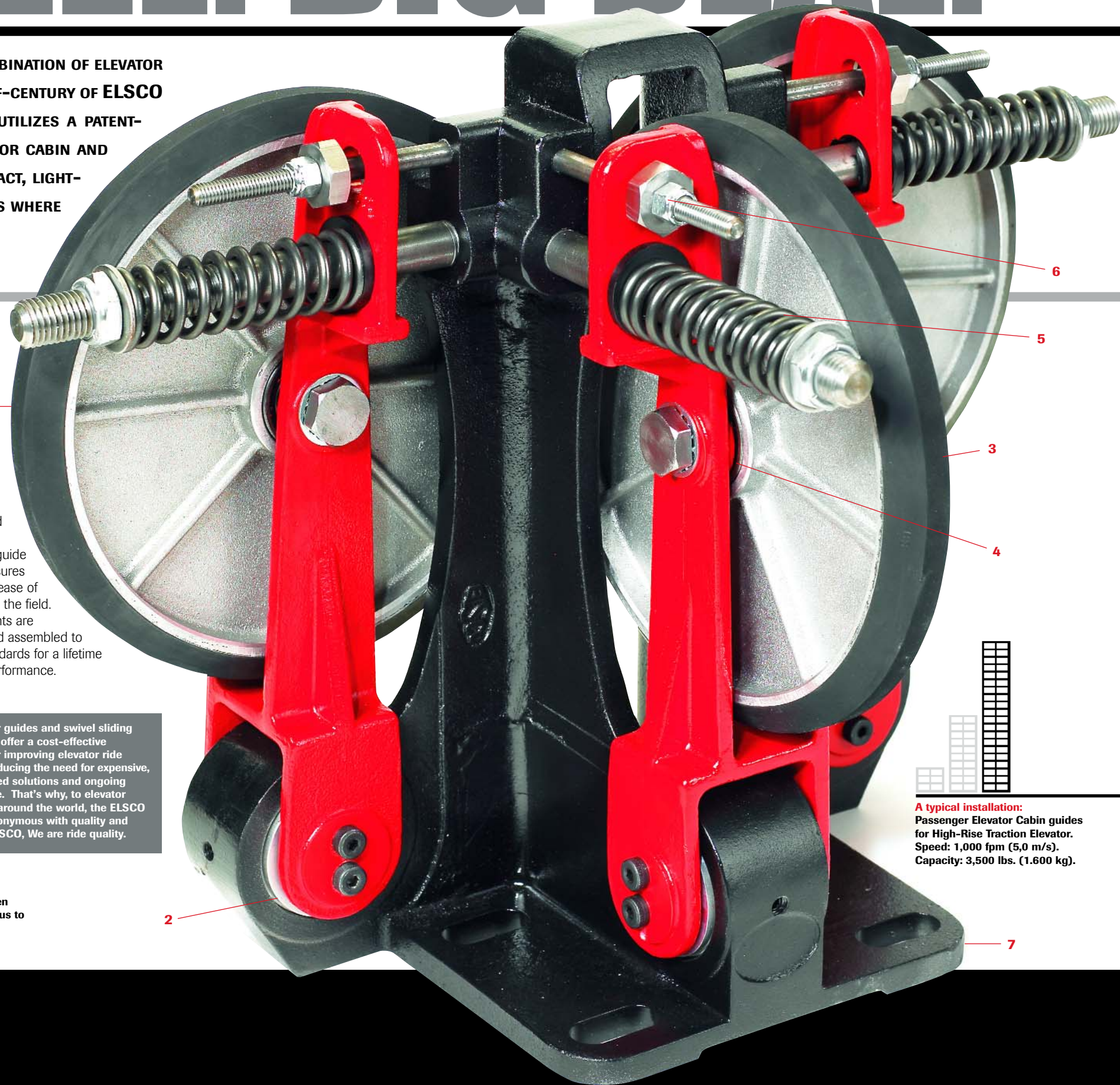
ELSCO roller guides and swivel sliding guide shoes offer a cost-effective approach for improving elevator ride quality by reducing the need for expensive, labor-oriented solutions and ongoing maintenance. That's why, to elevator contractors around the world, the ELSCO name is synonymous with quality and value. At ELSCO, We are ride quality.

Many factors must be considered when making a guide selection. Please call us to discuss your specific application.

◀ See inside for mounting instructions.

ELSCO

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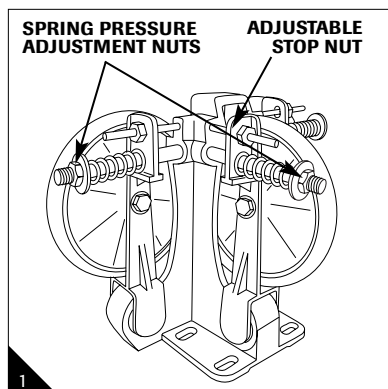


A typical installation:
Passenger Elevator Cabin guides
for High-Rise Traction Elevator.
Speed: 1,000 fpm (5.0 m/s).
Capacity: 3,500 lbs. (1,600 kg).

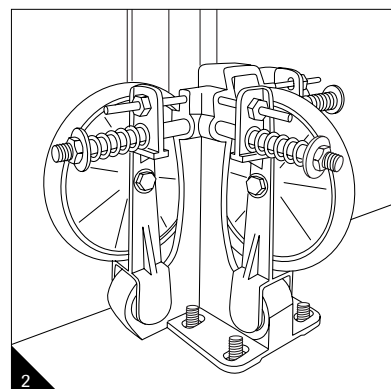


ELSCO Express-3 elevator roller guides are designed with adjustment features that provide superior riding characteristics. The installer can easily adjust ELSCO guides to compensate for adverse operating conditions and to minimize noise, bumps and vibration. For optimum performance and longer roller wheel life, we recommend that elevator rails be properly aligned and cleaned, and the car balanced before operation.

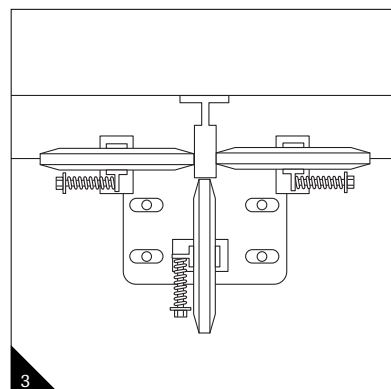
ELSCO roller guides are carefully assembled, inspected, and packed to arrive in perfect condition. When your shipment arrives, inspect it carefully for damage and, if appropriate, immediately file a claim with the carrier. For best results, read all instructions thoroughly before proceeding with the installation.



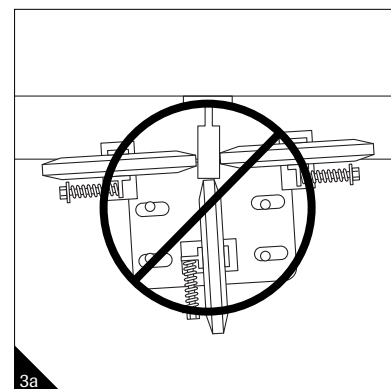
The Express-3 Guide comes completely assembled.



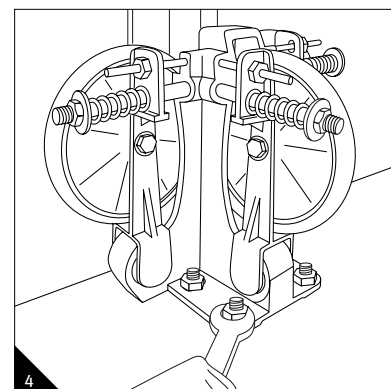
Begin by securing all four roller guides to the car frame. Starting with either top roller guide, position guide base over mounting holes or studs. Install mounting hardware (not included).



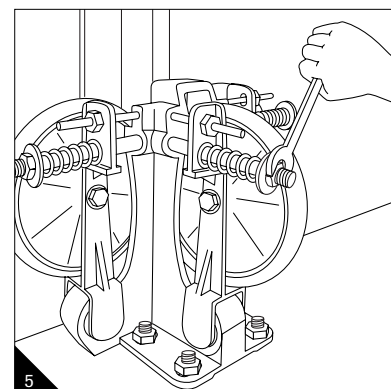
Position guide with the tread of face roller centered on rail as shown above. Be sure that guides are aligned properly (as shown) before making any further adjustments.



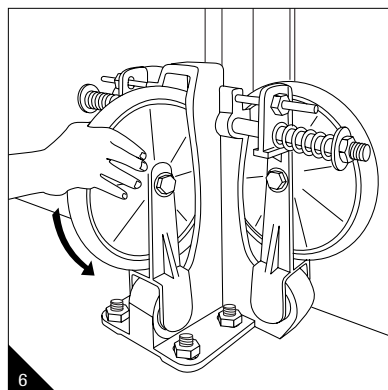
Improper alignment.



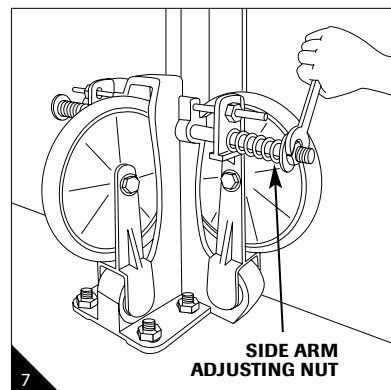
Securely tighten the mounting bolts and/or nuts. Before making any adjustments, install all remaining roller guides by securing them to the car frame as shown in steps 2-4.



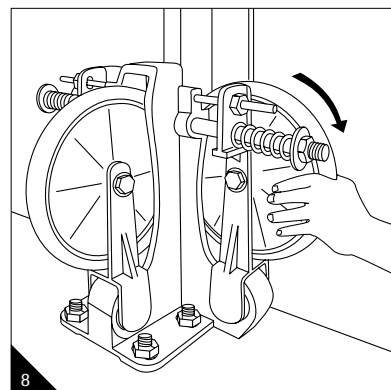
Begin adjustment with the top two roller guides. Using the spring pressure adjustment nut, tighten all three roller wheels on one guide so that each just touches the rail. There should be no pressure exerted on the rail at this point. **Repeat step 5 on the opposite top roller guide.**



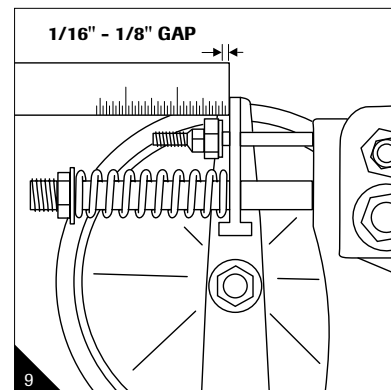
Tighten one face roller by 2 full turns of the spring pressure adjustment nut. Repeat on the opposite face roller. At this point, each face roller should exert 25-50 lbs. (12 to 25kg) pressure against the face of each rail. It will be possible to skid the face roller wheel by hand with moderate effort. Be certain that the face roller wheel pressures are equal for each guide; adjust as necessary.



Adjust side roller wheel pressure. Turn the side arm adjusting nuts 2 full turns on each side of the roller guide. The face arm wheels should be tracking in the center of the rail. This represents approximately 25 to 50 lbs. (12 to 25kg) of wheel pressure on each side arm wheel. Repeat on the opposite side roller guide.



When properly adjusted, it will be possible to skid the side arm roller wheels by hand with moderate effort.



Turn the adjustable stop nut to increase or decrease the gap between the arm and the rubber surface of the adjustable stop nut to achieve the desired float. Recommended gap adjustment is 1/16" to 1/8" (1.5-3.00mm). Lock adjustable stop nut in place by tightening the supplied lock nut.

10 Repeat step 9 for all three adjustable stops on each top roller guide.

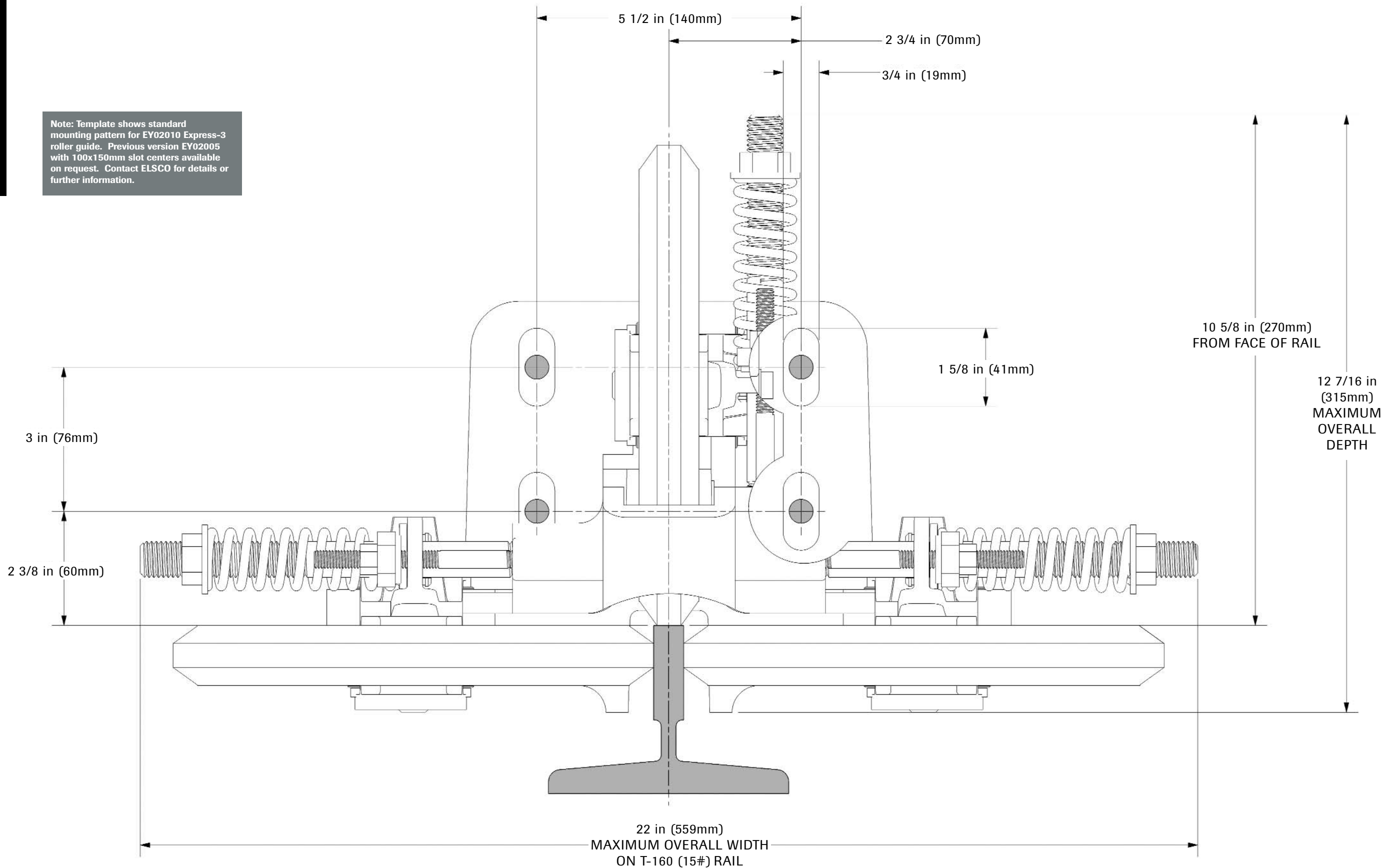
11 Repeat steps 5-10 on the bottom two roller guides.

12 After all adjustments have been made, ride elevator in both the up and down direction at inspection speed to check hoistway clearances. Check to be sure that all mounting bolts and/or nuts are securely tightened. Make several more runs at operating speed, then recheck float (if applicable), tracking, and roller wheel pressures before returning elevator to service.



TEMPLATE SHOWN 1:2 SCALE

Note: Template shows standard mounting pattern for EY02010 Express-3 roller guide. Previous version EY02005 with 100x150mm slot centers available on request. Contact ELSCO for details or further information.





SPECIFICATIONS

Size and Weight

Height, Overall	15-7/8"	(403mm)
Width on 30 lb., 1-1/4" Rail	22"	(559mm)
Width on 15 lb., 5/8" Rail	22"	(559mm)
Depth, Overall Maximum	12-7/16"	(316mm)
Shipping Weight	48 lbs.	(21.8kg)

Mounting Bolt Holes

Four Slots 1-5/8" x 3/4" (41mm x 19mm)
 Bolt Hole Locations Refer to Mounting Template

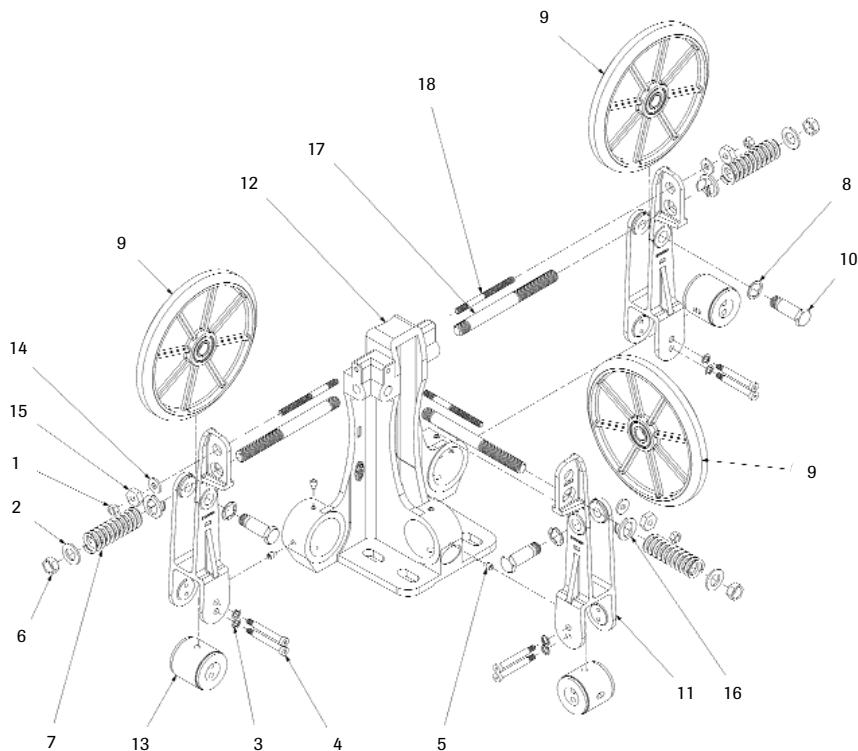
Roller Wheels

Thickness	1-1/4"	(32mm)
Neoprene Tread Width (face & side arm roller wheel)	1/2"	(13mm)
Polyurethane Tread Width (face roller wheel)	1/2"	(13mm)
(side arm roller wheel)	1/2"	(13mm)
Diameter	10"	(254mm)
Bearing I.D.	0.7874"	(20mm)
Runout (Total Indicator Reading)	0.002"	(.051mm)

Options and Factory Modifications Available

- Polyurethane composition roller wheels can be used to replace standard neoprene wheels in selected applications. Refer to the ELSCO guide selector chart or call an ELSCO guide specialist to determine proper applications. See our Frequently Asked Questions (FAQ) for more information about the trade-offs between neoprene and polyurethane wheel compositions.
- Cover plate kits are in stock and available for added safety and protection.

PARTS LIST



Express-3 Roller Guide

Key	Req.	Part #	Description
1	3	EY05001	Adjustable Stop Locking Nut
2	3	EY05002	Flat Washer
3	6	EB02116	Lock Washer
4	6	EY05004	Shoulder Bolt
5	6	EY02015	Set Screw
6	3	EA18376	Lock Nut
7	3	EA18380	Side/Face Arm Spring
8	3	EA18388	Wheel Stud Lock Washer
9	3		Roller Wheel - See Roller Wheel Options Below
10	3	EX02013	Wheel Stud
11	3	EY02003	Express-3 Side/Face Arm
12	1	EY02105	Base
13	3	EY02050	Elastomeric Bushing
14	3	EY02008	Adjustable Stop Rubber Bumper
15	3	EY02011	Adjustable Stop
16	3	EY02055	Arm Bushing
17	3	EY02031	Side/Face Arm Stud
18	3	EY02032	Adjustable Stop Stud

Standard Roller Wheel Configuration for Typical Installations:			
9	3	EX02002	Standard Neoprene Roller Wheel Assembly, 10 in. (254 mm)
Polyurethane Roller Wheel Configuration for Heavy-Duty Installations:			
9	3	EX02003	Polyurethane Roller Wheel Assembly, 10 in. (254mm)

- Notes:
- Top Level Assembly for Express-3 Roller Guide with Std. Neoprene Rollers is EY02010.
 - Not typically recommended. Call ELSCO previous to ordering.
 - Lifetime item not intended for field adjustment or replacement. Call ELSCO for information.
 - Items are adhered together in the factory and should be ordered together.