WELL-ROUNDED.

The Model C roller guide is unique in its suitability to a wide variety of elevator applications. It is primarily intended as the counterweight partner to the Model A roller guide. Yet it is also appropriate for use on elevator cabs where the ride quality advantages of six-wheel construction are needed, or where a smaller roller is required for clearance, such as in corner post applications.

Features of the Model C Guide:

1. **Six-Wheel Construction** improves ride quality and extends the application range. The tandem roller design allows the guide to “step over” misaligned rail joints with only minimal disturbance to the cab and its occupants. And by using six wheels where most other guides use just three, the Model C can withstand the higher loads associated with service and hospital cars. The added stability also helps compensate for unbalanced conditions.

2. **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.

3. **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 three ten-thousandths (0.003) of an inch (0.076mm), and two bearings are pressed into each wheel by a computer-driven press, ensuring perfect fit and alignment.

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

5. **Optional Adjustable Stops** enable precise control of the car’s overall postwise float between the rails.

6. **Durable Structural Components.** ELSCO castings are made from high-tensile-strength duraluminum 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.

Many factors must be considered when making a guide selection. Please call us to discuss your specific application.
ELSCO Model C elevator roller guides are designed with adjustable features that provide superior riding characteristics. The installer can easily adjust ELSCO guides to compensate for adverse operating conditions and to minimize noise, bounce 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 Model C Guide includes: a mounting bracket, wheel cluster assembly, and bag containing a spring and hub adjusting screw with locknut.

**Installation Instructions**

Mounting Template

**Model C**

**Grease Fitting**

At this point, install the remaining roller guides on top and/or beneath the elevator. Lubricate the fitting on each guide with general purpose grease until a small amount appears between the hub and the bracket.

HUB ADJUSTING SCREW

Turn the large hub adjusting screw until roller wheel fits is compressed 3/8" to 1/2" (1 to 2mm) on the rail. This represents approximately 25 to 50 lbs. (12 to 25kg) of wheel pressure. **Note:** If installing guides equipped with polyurethane roller wheels, refer to step 21 for pertinent information.

SIDE ARM TRACKING LOCKNUT

If it is necessary to adjust side arm tracking, loosen locknuts and turn side arm tracking screws until top and bottom roller wheels are parallel to the face of the rail. Tighten locknuts. **Note:** If adjustable stops have been ordered, you will also receive a solid stop washer, an adjustable stop shaft, lock washer and locknut.

SIDE ARM TRACKING SCREW

Repeat steps 14 through 17 for each remaining roller guide.

If the guides are equipped with adjustable stops, proceed with steps 19 and 20.

SIDE ARM TRACKING SCREW

When properly adjusted, it will be possible to skid the face roller wheel by hand with moderate effort.

SIDE ARM TRACKING SCREW

When the desired amount of postwise float is set, tighten the locknut securely while holding float adjustment screw in place. **Note:** Each full turn equals 1/16" (2mm).

SIDE ARM TRACKING SCREW

When adjusting nuts until side wheels are compressed 1/4" (6mm), but should never exceed 3/8" (10mm). Now tighten adjusting screw locknut.

ADJUSTING SCREW LOCKNUT

Be certain that both the face wheel pressure and the recommended gap measurement (refer to step 8) are equal for each guide. **Caution:** This gap measurement may now be greater than 7/32" (5.5mm), but should never exceed 7/16" (11mm). Now tighten adjusting screw locknut.

ADJUSTING SCREW LOCKNUT

Be certain that both face wheel pressure and the recommended gap measurement (refer to step 8) are equal for each guide. **Caution:** This gap measurement may now be greater than 7/32" (5.5mm), but should never exceed 7/16" (11mm). Now tighten adjusting screw locknut.

TIGHTEN

Adjust side arm roller pressure. Turn side arm adjusting nuts until side wheels are compressed 1/16" to 1/8" (1 to 2mm) and the face wheels are tracking in the center of the rail. **Note:** If guides are equipped with polyurethane roller wheels, refer to step 21 for allowable pressures.

At this point, there will be 25 to 50 lbs. (12 to 25kg) of pressure on each side roller wheel, and the wheels can be skidded by hand on the rail with moderate effort.

Install the hub adjusting screw assembly and nut into bracket. Adjustment of the large screw regulates the pressure of the face roller wheels against the rail.

Each pair of side arm roller wheels should track parallel to the face of the rail. The distances from the edge of each roller wheel to the face edge of the rail should be the same at both the top and bottom roller wheels of each pair. **Note:** The axe arm tracking screws are pre-set at the factory and should need no further adjustment.

At this point, install the remaining roller guides on top and/or beneath the elevator. Lubricate the fitting on each guide with general purpose grease until a small amount appears between the hub and the bracket.

Be sure guides are aligned properly (as shown) before making any further adjustments.

Improper alignment.

Position uppermost roller wheels of wheel cluster assembly onto the rail, and while maintaining pressure against the rail, roll entire assembly upward until face roller wheels are firmly seated on the rail.

Place bracket onto the hub of wheel cluster assembly.

With the desired amount of postwise float is set, tighten the locknut securely while holding float adjustment screw in place. **Note:** Each full turn equals 1/16" (2mm).

When the desired amount of postwise float is set, tighten the locknut securely while holding float adjustment screw in place. **Note:** Each full turn equals 1/16" (2mm).

TIGHTEN

If installing guides equipped with polyurethane wheels, refer to step 21 for pertinent information.

ELSCO’s polyurethane roller wheels are a hard (95 Shore A durometer) polymer material intended for use on lower speed elevators when the roller wheel pressures exceed those specified for neoprene composition wheels (25 to 50 lbs., or 12 to 25kg).

While polyurethane roller wheels are capable of operating at higher pressures, it is advisable to keep static pressure as low as possible to prevent flat spots from forming while the elevator is sitting. Flat spots can adversely affect ride quality by creating rough and/or noisy ride. At higher pressures, it may not be possible to skid the wheels by hand.

Each pair of side arm roller wheels should track parallel to the face of the rail. The distance from the edge of each roller wheel to the face edge of the rail should be the same at both the top and bottom roller wheels of each pair. **Note:** The axe arm tracking screws are pre-set at the factory and should need no further adjustment.

Each pair of side arm roller wheels should track parallel to the face of the rail. The distance from the edge of each roller wheel to the face edge of the rail should be the same at both the top and bottom roller wheels of each pair. **Note:** The axe arm tracking screws are pre-set at the factory and should need no further adjustment.

After all adjustments have been made, ride elevator in both the up and down direction at inspection speed to check footwear clearances.

Check to be sure that all mounting bolts and nuts, and adjustment locknuts are securely tightened. Make several more runs at operating speed, then re-check float (if applicable), tracking and roller wheel pressures before returning elevator to service.

**Model C**

**Mounting Template**

**Model C**

**GREASE FITTING**

**HUB ADJUSTING SCREW**

**ADJUSTING SCREW LOCKNUT**

**SIDE ARM TRACKING SCREW**

**SIDE ARM TRACKING LOCKNUT**

**FLOAT ADJUSTMENT SCREW**

**FLOAT ADJUSTMENT SCREW LOCKNUT**

**Mounting Template**
Model C
Mounting Template

7 3/8 in
(187mm)
FROM FACE OF RAIL

8 1/2 in
(216mm)
MAXIMUM OVERALL DEPTH

8 5/8 in
(219mm)
MAXIMUM OVERALL WIDTH
ON T-161 (8#) RAIL

2 3/8 in
(60.3mm)

1 3/16 in
(21mm)

1 1/16 in
(27mm)

13/16 in
(21mm)

7 3/8 in
(187mm)

1 3/16 in
(30mm)

2 3/8 in
(35mm)

1 3/8 in
(30mm)

8 1/2 in
(216mm)

MAXIMUM OVERALL WIDTH
ON T-161 (8#) RAIL

TEMPLATE SHOWN ACTUAL SIZE
SPECIFICATIONS

Size and Weight

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
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<tbody>
<tr>
<td>Height, Overall</td>
<td>13-5/8” (346mm)</td>
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<tr>
<td>Width, Overall</td>
<td>8-5/8” (219mm)</td>
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<tr>
<td>Depth, Overall Maximum</td>
<td>7-1/8” (181mm)</td>
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<tr>
<td>Shipping Weight</td>
<td>28 lbs. (12.7 kg)</td>
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Mounting Bolt Holes

<table>
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<tr>
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<th>Measurements</th>
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<tbody>
<tr>
<td>Four Slots</td>
<td>11/16” x 1-1/16” (17mm x 27mm)</td>
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Roller Wheels

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<tr>
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<tbody>
<tr>
<td>Thickness</td>
<td>15/16” (24mm)</td>
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<tr>
<td>Neoprene Tread Width</td>
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<tr>
<td>Polyurethane Tread Width</td>
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<tr>
<td>Diameter</td>
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<tr>
<td>Bearing I.D.</td>
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<tr>
<td>Runout</td>
<td>0.002” (.051mm)</td>
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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.
- Special “close clearance” modification is available to limit overall guide width to 7-1/8” (181mm) on 5/8” (16mm) rail widths where required for tight hoistway clearances, as in corner-post applications.
- Cover plate kits are in stock and available for added safety and protection.
- Seismic retainer plates are available for select rail sizes. Call or e-mail for more information.

PARTS LIST

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<td>EC18414</td>
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Notes:
Top Level Assembly for Model C Roller Guide with Std. Neoprene Rollers is EC18400.
Top Level Assembly for Model C Roller Guide with Polyurethane Rollers is EC18445.
Adjustable Stop Kits are available as an option under part no. EC18412.
**Parts cannot be ordered individually, and must be ordered as a complete subassembly.**