Aluminum "SuperTrough" is a modular guide trough system for long travels. Aluminum "SuperTrough" is available in low cost "basic versions" and can be upgraded for heavy duty applications. This universal usage makes it the igus® recommended new standard trough system.

- Excellent wear and noise levels with igus® Energy Chains® - a 9.0 dB(A) noise reduction was achieved through Aluminum "SuperTrough" with noise reduction profile insert, in combination with optimized igus® Rol E-Chain®
- Very easy, universal assembly
- Multiple fastening options with heavy duty brackets, bottom clamps and interface connectors
- Side-mount glide strips for wear protection in high-speed
- Corrosion proof through seawater resistant aluminum
- Flexible assembly - connects to mounting surface, independent from profile length and location of trough section interfaces
Aluminum "SuperTrough"

The Aluminum "SuperTrough" is a modular guide trough system for long travels. Aluminum "SuperTrough" is available in low cost "basic versions" and can be upgraded for heavy duty applications. **This universal usage makes it the igus® recommended new standard trough system.**

1. **Aluminium profile**
   - Seawater resistant
   - Corrosion resistant
   - Standard 6.56 ft (2m) length

2. **Interface connector**
   - Snap-on polymer connector
   - Easy assembly, no tools needed

3. **Bottom clamp**
   - Fast and easy single-bolt assembly
   - Slider attached inwards or outwards, directly to the ground or onto a C-profile

4. **C-Profile**
   - Hold Bottom clamps or heavy duty brackets
   - Available in zinc-plated or stainless steel

5. **Glide strip**
   - Protect from wear on the sides
   - Easy click-on assembly (tongue and groove), no tools needed

6. **Polymer glide bar**
   - Easy click-on assembly (tongue and groove), no tools needed

7. **Silencer profile (Add-on item)**
   - Rubber profile insert for additional noise reduction

8. **Heavy duty bracket (Add-on item)**
   - Safe grip for heavy duty operation
   - Easy tongue and groove assembly
   - Attached directly to ground or to C-profiles
**Aluminum "SuperTrough"**

**New!** A quick fix for mounting the stationary end of an Energy Chain®

With this new module for the fixed end, fast and easy mounting onto the “SuperTrough” is now possible without any drilling. • Fast mounting for the Energy Chain® by clamping onto the aluminum trough • Quick relocation of the stationary end • No drilling necessary

**Installation - A) Fixed-end module, B) KMA-mounting bracket**

1. Removing the pre-assembled metal bushings
2. Use of threaded bushings
3. Installation of fixed-end module
4. Mounting on aluminum “SuperTrough”

**Part No.** | **SuperTrough** | **For Series**
---|---|---
971-80 | 971-30-SL / 971-31-SL | 2480
972-82 | 972-02-30-SL / 972-02-31-SL | 220/R760
972-81 | 972-30-SL / 972-32-SL | 2680
972-80 | 972-30-SL / 972-31-SL | 280/290/R770, 2828/2928/R7728, E6-40
973-81 | 973-30-SL / 973-31-SL | 380/390/R780, 3838/3938/R7838, E6-52/R6-52
973-80 | 973-30-SL / 973-31-SL | 3480
974-81 | 974-30-SL / 974-31-SL | 14040/14140/R18840, 14240/14340
974-80 | 974-30-SL / 974-31-SL | 400/410/R880, 4040/4140/R8840, E6-62
975-80 | 975-30-SL / 975-31-SL | 5050/5150/R9850, 15050/15150/R19850, E6-80/E6-80L
The igus® aluminum "SuperTrough" has been tested since 2005.

Test "Axis 1": Speed 4.92 ft/s (1.5 m/s), Travel: 59 ft (18m), Mileage to date: approximately 31,069 miles (50,000 km)

Test - Glide strips minimize wear after 1,653,187 cycles, 2,672 miles (4,300 km)

Vibration test: No shifting of trough sections after 108,000,000 rotations at 658 rpm.

Test - Interface connector
- Push/pull force of 80 psi
- 9,890,000 cycles without shifting of the connector

Alternating push - and pull force of 90 psi is induced on 2 trough side parts, with no deformation after 1,700,000 cycles
### Installation Sets | Basic and Heavy Duty

<table>
<thead>
<tr>
<th>Installation Set Basic</th>
<th>Installation Set Heavy Duty</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Basic Installation Set" /></td>
<td><img src="image" alt="Heavy Duty Installation Set" /></td>
</tr>
</tbody>
</table>

#### Installation Set | Basic (Standard)

1. Pre-assemble clamp and screw
2. Clip in polymer connector on both sides of the designated support
3a. Fasten Basic assembly set inside or outside (Please check if the stability of the attachment is adequate). Please note: half the length of the assembly set and connector must protrude out of the trough. The glide nut should be well fastened in the C-profile

#### Installation Set | Heavy Duty (Alternative)

1. Pre-assemble heavy duty bracket and screw set
2. Fasten Heavy Duty assembly set outside.
   
   Please note: half the length of the assembly set and connector must protrude out of the trough.
Aluminum "SuperTrough"

Installing the silencer profile (optional)

1. Cut the rubber profile in accordance to the length of the trough, standard 6.66 ft. (2 m), and press it into the designated groove. (Pictured: although this shows the left hand side, the instructions are the same for the right hand side. To be repeated for each trough section.)

Connecting the trough sections

1. Join the sides of the trough side parts by pushing them together (min. +.08 (2mm) gap!)
2. The pre-assembled parts join each trough section

Adjusting the tolerance and aligning trough sections

1. Adjust the necessary minimum "chain/trough" tolerance of .08" (2mm) on both sides. Please note: the inner width RBI of the trough decreases .08" (2mm) per side with the assembled glide strip (pictured)
2. Test to ensure the Energy Chain® runs problem free and with low friction in the channel
3. After adjusting the minimum tolerance and alignment of all trough sections, please tighten all trough connections. Pay attention to the correct installation direction of the sliding nut (see detail)
   Starting torque of the assembly set’s fixing bolts: M6: 10 Nm / M8: 23 Nm.

Please consider health & safety regulations while handling sheet metals.
We recommend using protective Category II gloves to protect against cuts when handling the aluminum profiles.
Aluminum "SuperTrough"

Part No. 970-30-SL and 970-31-SL - Trough Height: 3.03 in. (77 mm)
Aluminum “SuperTrough” — Basic Version

For the following Energy Chains®/Energy Tubes
System E2 Series
- 10
- B15
Zipper Series
- 15/R15

Components, installation set "Basic":
1. Bottom clamp, aluminum
2. C-profile, steel galvanized
3. Screw M6 x 16
4. Sliding nut M6
5. Interface connector, plastic

Components, trough "Basic":
1. Trough side parts, aluminum, 6.56 ft. (2m)
2. Glide bar, plastic, 6.56 ft. (2m)
3. Glide strips, plastic, 6.56 ft. (2m) (without glide strips on request)
4. Optional: Silencer profile, rubber

Basic Version: Components
Complete guide trough sets - description

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set of 2 trough side parts, incl. glide strips, without glide bars, 6.56 ft (2 m) sections</td>
<td>970-30-SL</td>
<td>9.26 lbs</td>
</tr>
<tr>
<td>Set of 2 trough side parts, incl. glide strips, with glide bars, 6.56 ft (2 m) sections</td>
<td>970-31-SL</td>
<td>10.8 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; without C-profile</td>
<td>960-30</td>
<td>.13 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; with C-profile</td>
<td>960-30-___</td>
<td></td>
</tr>
</tbody>
</table>

Single parts - description

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Glide strip, individual, 6.56 ft. (2m) section</td>
<td>75-01</td>
<td>.13 lbs</td>
</tr>
<tr>
<td>1 Bottom clamp, individual</td>
<td>75-40</td>
<td>0.07 lbs</td>
</tr>
<tr>
<td>1 Interface connector, individual</td>
<td>75-60</td>
<td></td>
</tr>
<tr>
<td>1 Screw M6 x 16, individual</td>
<td>MAT0040209</td>
<td></td>
</tr>
<tr>
<td>1 Sliding nut M6, individual</td>
<td>MAT0040057</td>
<td></td>
</tr>
<tr>
<td>2 Glide bars, 6.56 ft. (2m) sections</td>
<td>82-79</td>
<td></td>
</tr>
<tr>
<td>1 C-profile, individual</td>
<td>92-52-___</td>
<td>1.23 lbs/ft</td>
</tr>
</tbody>
</table>

Supplement Part No. with the indicated C-profile-length-index.

Example: 960-30-125 C-profile-length-index for your chosen trough inner width BRi

See table on the right or the respective page for chosen series.
Aluminum "SuperTrough"

Lengths of C-Profile - Basic Version - Bottom Clamp attached either **inwards** or **outwards**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part No.</th>
<th>Part No.</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>B15.5</td>
<td>038</td>
<td>15/R15</td>
<td>038</td>
</tr>
<tr>
<td>10.5</td>
<td>038</td>
<td>15.5</td>
<td>038</td>
</tr>
</tbody>
</table>

| 10       | 1.18 (30) | 1.18 (30) | 1.18 (30) |
| 025      | 2.09 (53) | 2.09 (53) | 2.09 (53) |
| 038      | 2.56 (65) | 2.56 (65) | 2.56 (65) |
| 050      | 3.15 (80) | 3.15 (80) | 3.15 (80) |
| 060      | 3.86 (98) | 3.86 (98) | 3.86 (98) |
| 070      | 4.61 (117)| 4.61 (117)| 4.61 (117)|

Energy Chain® on the tower of the storage and retrieval unit for high-bay warehouses rolls off from one aluminum guide trough to the opposite one.
Aluminum "SuperTrough"

Part No. 970-30-SL and 970-32-SL - Trough Height: 3.03 in. (77 mm)

Aluminum "SuperTrough" — Basic Version

For the following Energy Chains®/Energy Tubes

System E2 Series
- 1400/1450/1480/1500

Ba = Outer E-Chain® width
Bi = Inner E-Chain® width
ha = E-Chain® outer height
H Ri = Inner trough height
H Ra = Outer trough height
B Ri = Inner trough width ▶
depends on dim. Ba
B Ra = Outer trough width
n Mon = # of installation sets
(left/right)
n Ri = # of trough set
(left/right)

HRi ≥ 2 • ha
B Ri ≥ Ba + 4

= Guide trough
= Glide bar
= Installation set "Basic"
= C-profile

Components, trough "Basic":
1. Trough side parts, aluminum, 6.56 ft. (2m)
2. Glide bar, plastic, 6.56 ft. (2m)
3. Glide strips, plastic, 6.56 ft. (2m) (without glide strips on request)
4. Optional: Silencer profile, rubber

Components, installation set:
1. Bottom clamp, aluminum
2. C-profile, steel galvanized
3. Screw M6 x 16
4. Sliding nut M6
5. Interface connector, plastic

Basic Version: Components

Complete guide trough sets - description

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>970-30-SL</td>
<td>9.26 lbs</td>
</tr>
<tr>
<td>970-32-SL</td>
<td>11.02 lbs</td>
</tr>
<tr>
<td>960-30</td>
<td>.13 lbs</td>
</tr>
</tbody>
</table>

Set of 2 trough side parts, incl. glide strips, without glide bars, 6.56 ft [2 m] section
Set of 2 trough side parts, incl. glide strips, with glide bars, 6.56 ft. [2m] section
1 Installation set "Basic" without C-profile
1 Installation set "Basic" with C-profile

Single parts - description

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-01</td>
<td>.13 lbs</td>
</tr>
<tr>
<td>75-40</td>
<td>0.07 lbs</td>
</tr>
<tr>
<td>75-60</td>
<td></td>
</tr>
<tr>
<td>MAT0040209</td>
<td></td>
</tr>
<tr>
<td>MAT0040057</td>
<td></td>
</tr>
<tr>
<td>82-79</td>
<td></td>
</tr>
<tr>
<td>92-52-____</td>
<td>1.23 lbs/ft</td>
</tr>
</tbody>
</table>

1 Glide strip, individual, 6.56 ft. (2m) section
1 Bottom clamp, individual
1 Interface connector, individual
1 Screw M6 x 16, individual
1 Sliding nut M6, individual
2 Glide bars, 6.56 ft. (2m) sections
1 C-profile, individual

Supplement Part No. with the indicated C-profile-length-index.

Example: 960-30-____ C-profile-length-index for your chosen trough inner width B Ri

See table on the right or the respective page for chosen series
Aluminum "SuperTrough"

Lengths of C-Profile - Basic Version - Bottom Clamp attached either **inwards** or **outwards**

<table>
<thead>
<tr>
<th>BRi</th>
<th>Part No. attached inwards</th>
<th>Part No. attached outwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>-015</td>
<td>1.30 (33)</td>
<td>960-30-125</td>
</tr>
<tr>
<td>-020</td>
<td>1.50 (38)</td>
<td>960-30-125</td>
</tr>
<tr>
<td>-025</td>
<td>1.69 (43)</td>
<td>960-30-150</td>
</tr>
<tr>
<td>-038</td>
<td>2.20 (56)</td>
<td>960-30-150</td>
</tr>
<tr>
<td>-060</td>
<td>2.66 (68)</td>
<td>960-30-125, 960-30-175</td>
</tr>
<tr>
<td>-080</td>
<td>3.39 (86)</td>
<td>960-30-150, 960-30-175</td>
</tr>
<tr>
<td>-080</td>
<td>3.86 (98)</td>
<td>960-30-150, 960-30-200</td>
</tr>
<tr>
<td>-100</td>
<td>4.65 (118)</td>
<td>960-30-175, 960-30-225</td>
</tr>
<tr>
<td>-125</td>
<td>5.63 (143)</td>
<td>960-30-200, 960-30-250</td>
</tr>
</tbody>
</table>

Aluminum "SuperTrough"

Part No. 971-30-SL and 971-31-SL - Trough Height: 3.42 in. (87 mm)

Aluminum “SuperTrough” — Basic Version

Basic version: Aluminum "SuperTrough" components

<table>
<thead>
<tr>
<th>Complete guide trough sets - description</th>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set of 2 trough side parts, incl. glide strips, without glide bars, 6.56 ft. (2m) section</td>
<td>971-30-SL</td>
<td>≈11.02 lbs</td>
</tr>
<tr>
<td>Set of 2 trough side parts, incl. glide strips, with glide bars, 6.56 ft. (2m) section</td>
<td>971-31-SL</td>
<td>≈14.11 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; without C-profile</td>
<td>960-30</td>
<td>≈.13 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; with C-profile</td>
<td>960-30-____</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Single parts - description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Glide strip, individual, 6.56 ft. (2m) section</td>
</tr>
<tr>
<td>1 Bottom clamp, individual</td>
</tr>
<tr>
<td>1 Interface connector, individual</td>
</tr>
<tr>
<td>1 Screw M6 x 16, individual</td>
</tr>
<tr>
<td>1 Sliding nut M6, individual</td>
</tr>
<tr>
<td>2 Glide bar, 6.56 ft. (2m) sections</td>
</tr>
<tr>
<td>1 C-profile, individual</td>
</tr>
</tbody>
</table>

Supplement Part No. with the indicated C-profile-length-index.

Example: 960-30-150 C-profile-length-index for your chosen trough inner width Br

See table on the right or the respective page for chosen series

Number of installation sets which have to be installed

\[ n_{\text{inst}} = n_{\text{RL}} + 1 \]

\[ n_{\text{inst}} \times 78.6 \text{ in. (1998 mm)} \]
Aluminum "SuperTrough"

Lengths of C-Profile - Basic Version
Bottom Clamp can be attached either inwards or outwards

<table>
<thead>
<tr>
<th>Lengths</th>
<th>E6-29</th>
</tr>
</thead>
<tbody>
<tr>
<td>2400-02-200-0</td>
<td>E6-29-030-100-0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BRi in. (mm)</th>
<th>Part No. attached inwards</th>
<th>Part No. attached outwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>-02 1.77 (45)</td>
<td>* 960-30-150</td>
<td>* 960-30-150</td>
</tr>
<tr>
<td>-03 2.28 (58)</td>
<td>* 960-30-150</td>
<td>* 960-30-150</td>
</tr>
<tr>
<td>-05 3.03 (77)</td>
<td>960-30-125 960-30-175</td>
<td>960-30-150</td>
</tr>
<tr>
<td>-07 3.82 (97)</td>
<td>960-30-150 960-30-200</td>
<td>960-30-175</td>
</tr>
<tr>
<td>-09 4.29 (109)</td>
<td>960-30-175 960-30-225</td>
<td>960-30-175</td>
</tr>
<tr>
<td>-10 4.84 (123)</td>
<td>960-30-175 960-30-225</td>
<td>960-30-175</td>
</tr>
<tr>
<td>-12 5.71 (145)</td>
<td>960-30-200 960-30-250</td>
<td>960-30-200</td>
</tr>
</tbody>
</table>

For the "Heavy Duty" installation set:
Insert Part No. 971-50-____ instead of 960-30-____
on the right column "attached outwards"

Heavy Duty Version - Installation Set Part No. 971-50

- Components, trough "Heavy Duty":
  1. Trough side parts, aluminum, 6.56 ft. (2m)
  2. Glide bar, plastic, 6.56 ft. (2m)
  3. Glide strips, plastic 6.56 ft. (2m)
  (without glide strips on request)
  4. Optional: Silencer profile, rubber

- Components, installation set "Heavy Duty":
  5. C-profile, steel galvanized
  6. Sliding nut M6
  7. Heavy duty bracket, aluminum
  8. Screw M6 x 20

Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing
Aluminum "SuperTrough"

For the following Series

System E4 Series:
- 280/290/R770
- 2828/2928/R7728

System E6 Series:
- E6-40

Part No. 972-30-SL and 972-31-SL Trough Height: 4.61 in. (117 mm)

Aluminum "SuperTrough" — Basic Version

**Components, trough:**
- Trough side parts, aluminum, 6.56 ft. (2m)
- Glide bar, plastic, 6.56 ft. (2m)
- Glide strips, plastic, 6.56 ft. (2m) (without glide strips on request)
- Optional: Silencer profile, rubber

**Components, installation set:**
- Bottom clamp, aluminum
- C-profile, steel galvanized
- Screw M6 x 16
- Sliding nut M6
- Interface connector, plastic

**Basic version: Aluminum "SuperTrough" components**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete guide trough sets - description</td>
<td>972-30-SL</td>
<td>13.23 lbs</td>
</tr>
<tr>
<td>Complete guide trough sets - description</td>
<td>972-31-SL</td>
<td>16.31 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; without C-profile</td>
<td>960-30</td>
<td>.13 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; with C-profile</td>
<td>960-30-____</td>
<td>.13 lbs</td>
</tr>
<tr>
<td>Single parts - description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Glide strip, individual, 6.56 ft. (2m) section</td>
<td>75-01</td>
<td>.13 lbs</td>
</tr>
<tr>
<td>1 Bottom clamp, individual</td>
<td>75-67-H</td>
<td>.07 lbs</td>
</tr>
<tr>
<td>1 Interface connector, individual</td>
<td>75-60</td>
<td></td>
</tr>
<tr>
<td>1 Screw M6 x 16, individual</td>
<td>MAT 0040209</td>
<td></td>
</tr>
<tr>
<td>1 Sliding nut M6, individual</td>
<td>MAT 0040057</td>
<td></td>
</tr>
<tr>
<td>2 Glide bars, 6.56 ft. (2m) sections</td>
<td>82-79</td>
<td></td>
</tr>
<tr>
<td>1 C-profile, individual</td>
<td>92-52-____</td>
<td>1.23 lbs/ft.</td>
</tr>
</tbody>
</table>

Supplement Part No. with the indicated C-profile-length-index.

Example: 960-30-150 C-profile-length-index for your chosen trough inner width BRi

See table on the right for chosen series

**Number of installation sets which have to be installed**

\[ n_{\text{Inst}} = n_R + 1 \]
Aluminum "SuperTrough"

Lengths of C-Profile - Basic Version
Bottom Clamp can be attached either inwards or outwards

<table>
<thead>
<tr>
<th>BRi</th>
<th>Part No. attached inwards</th>
<th>Part No. attached outwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>280/290/R770</td>
<td>280-05-200-0</td>
<td></td>
</tr>
<tr>
<td>2828/2928/R7728</td>
<td>2828-05-200-0</td>
<td></td>
</tr>
<tr>
<td>E6-40</td>
<td>E6-40-040-063-0</td>
<td></td>
</tr>
</tbody>
</table>

### Heavy Duty Version - Installation Set Part No. 972-50

- **Components, trough "Heavy Duty":**
  - Trough side parts, aluminum, 6.56 ft. (2m)
  - Glide bar, steel, 6.56 ft. (2m)
  - Glide strips, plastic 6.56 ft. (2m) (without glide strips on request)
  - Optional: Slidemaster profile, rubber

- **Components, installation set "Heavy Duty":**
  - C-profile, steel galvanized
  - Slidemaster profile, M6
  - Heavy duty bracket, aluminum

Note: Dimensions similar to Basic version!

*Upon request*

*For the "Heavy Duty" installation set:
Insert Part No. 972-50-____ instead of 960-30-____ on the right column "attached outwards"*

* = Guide trough
** = Glide bar
### = Installation set "Heavy Duty"
### = C-profile
Aluminum "SuperTrough"

For the following Series
System E4 Series:
- 2680
- 26/27/V27
System E2 Tube Series:
- R58

Part No. 972-30-SL and 972-32-SL  Trough Height: 4.61 in. (117 mm)
Aluminum “SuperTrough” — Basic Version

![Diagram of the "SuperTrough" system]

Components, installation set:
- Bottom clamp, aluminum
- C-profile, steel galvanized
- Screw M6 x 16
- Sliding nut M6
- Interface connector, plastic

Basic version: Aluminum "SuperTrough" components

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete guide trough sets - description</td>
<td>972-30-SL</td>
<td>≈ 13.23 lbs</td>
</tr>
<tr>
<td>Set of 2 trough side parts, incl. glide strips, without glide bars, 6.56 ft. (2m) section</td>
<td>972-32-SL</td>
<td>≈ 16.31 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; without C-profile</td>
<td>960-30</td>
<td>≈ 0.13 lbs</td>
</tr>
<tr>
<td>1 Installation set &quot;Basic&quot; with C-profile</td>
<td>960-30-____</td>
<td></td>
</tr>
<tr>
<td>Single parts - description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Glide strip, individual, 6.56 ft. (2m) section</td>
<td>75-01</td>
<td>≈ 0.13 lbs</td>
</tr>
<tr>
<td>1 Bottom clamp, individual</td>
<td>75-40</td>
<td>≈ 0.07 lbs</td>
</tr>
<tr>
<td>1 Interface connector, individual</td>
<td>75-60</td>
<td></td>
</tr>
<tr>
<td>1 Screw M6 x 16, individual</td>
<td>MAT 0040209</td>
<td></td>
</tr>
<tr>
<td>1 Sliding nut M6, individual</td>
<td>MAT 0040057</td>
<td></td>
</tr>
<tr>
<td>2 Glide bars, 6.56 ft. (2m) sections</td>
<td>82-79</td>
<td></td>
</tr>
<tr>
<td>1 C-profile, individual</td>
<td>92-52-____</td>
<td>≈ 1.23 lbs/ft.</td>
</tr>
</tbody>
</table>

Supplement Part No. with the indicated C-profile-length-index.
Example: 960-30-150  C-profile-length-index for your chosen trough inner width BRi
See table on the right or the respective page for chosen series

Number of installation sets which have to be installed

nRi = nRi + 1
nRi x 78.6 in. (1998 mm)
Aluminum "SuperTrough"

Lengths of C-Profile - Basic Version
Bottom Clamp can be attached either **inwards** or **outwards**

### Heavy Duty Version - Installation Set Part No. 972-50

- **Components, trough "Heavy Duty":**
  - 1. Trough side parts, aluminum, 6.56 ft. (2m)
  - 2. Glide bar, plastic, 6.56 ft. (2m)
  - 3. Glide strips, plastic 6.56 ft. (2m) (without glide strips on request)
  - Optional: Silencer profile, rubber
- **Components, installation set "Heavy Duty":**
  - 5. C-profile, steel galvanized
  - 7. Sliding nut M6
  - 9. Heavy duty bracket, aluminum
  - 11. Screw M6 x 20

For the "Heavy Duty" installation set: Insert Part No. **972-50-____** instead of **960-30-____** on the right column "attached outwards"

Note: Dimensions similar to Basic version! Exception: Heavy duty bracket, see drawing

Stable guidance without oscillation. Because of the compact design of the aluminum "SuperTrough" the need for space along the travel path is small.

Travel 105 ft. (32 m) Crane operating speed 262 ft./min. (80 m/min).
Aluminum "SuperTrough"

Part No. 973-30-SL and 973-31-SL  Trough Height: 5.67 in. (144 mm)
Aluminum "SuperTrough" — Basic Version

For the following Series

System E2 Series:
- 340
- 340/350

System E2 Tube Series:
- R68

System E4 Series:
- 380/390/R780
- 3838/3938/R7838

System E6 Series:
- E6-52/R6-52

Components, trough:
1. Trough side parts, aluminum, 6.56 ft. (2m)
2. Glide bar, plastic, 6.56 ft. (2m)
3. Glide strips, plastic, 6.56 ft. (2m) (without glide strips on request)
4. Optional: Silencer profile, rubber

Components, installation set:
1. Bottom clamp, aluminum
2. C-profile, steel galvanized
3. Screw M8 x20
4. Sliding nut M6
5. Interface M8

Basic version: Aluminum "SuperTrough" components

Complete guide trough sets - description

| Set of 2 trough side parts, incl. glide strips, without glide bars, 6.56 ft. (2m) section | Part No. 973-30-SL | Weight ≈ 17.64 lbs |
| Set of 2 trough side parts, incl. glide strips, with glide bars, 6.56 ft. (2m) section | 973-31-SL | ≈ 23.81 lbs |
| 1 Installation set "Basic" without C-profile | 960-30 | ≈ .18 lbs |
| 1 Installation set "Basic" with C-profile | 960-30-____ |

Single parts - description

| 1 Glide strip, individual, 6.56 ft. (2m) section | Part No. 75-01 | Weight ≈ .13 lbs |
| 1 Bottom clamp, individual | 75-68-H | ≈ .09 lbs |
| 1 Interface connector, individual | 75-60 |
| 1 Screw M6 x 18, individual | MAT 0040209 |
| 1 Sliding nut M6, individual | MAT 0040057 |
| 2 Glide bars, 6.56 ft. (2m) sections | 82-79 |
| 1 C-profile, individual | 92-52-____ | ≈ 1.23 lbs/ft. |

Supplement Part No. with the indicated C-profile-length-index.
Example: 960-30-150  C-profile-length-index for your chosen trough inner width \( B_{Ri} \)

See table on the right or the respective page for chosen series

Number of installation sets which have to be installed

\[
N_{Mon} = N_{RI} + 1
\]
\[
N_{RI} = \frac{H_{Ri}}{H_a} \geq 2 \cdot H_a
\]
\[
B_{Ri} \geq B_a + 4
\]
Aluminum "SuperTrough"

Lengths of C-Profile - Basic Version
Bottom Clamp can be attached either inwards or outwards

<table>
<thead>
<tr>
<th>Length (mm)</th>
<th>Part No.</th>
<th>Part No. attached inwards</th>
<th>Part No. attached outwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3400-050-200-0</td>
<td>3400/3450/3480/3500</td>
<td>360-2.91 (14)</td>
<td>960-40-200</td>
</tr>
<tr>
<td>340/350</td>
<td>3400-050-200-0</td>
<td>360-2.91 (14)</td>
<td>960-40-200</td>
</tr>
<tr>
<td>380/390/R780</td>
<td>380-05-200-0</td>
<td>360-3.15 (10)</td>
<td>960-40-200</td>
</tr>
<tr>
<td>3838/3938/R7838</td>
<td>3838-05-200-0</td>
<td>360-3.15 (10)</td>
<td>960-40-200</td>
</tr>
</tbody>
</table>

Components, trough "Heavy Duty":
1. Trough side parts, aluminium, 6.56 ft. (2m)
2. Glide bar, plastic, 6.56 ft. (2m)
3. Glide strips, plastic, 6.56 ft. (2m)
4. Screw M8 x 25

Optional: Silencer profile, rubber

Components, installation set "Heavy Duty":
5. C-profile, steel galvanized
6. Sliding nut M6
7. Heavy duty bracket, aluminum
8. Screw M8 x 25

Note: Dimensions similar to Basic version!

Exception: Heavy duty bracket, see drawing
Aluminum "SuperTrough"

Part No. 974-30-SL and 974-31-SL  Trough Height: 7.24 in. (184 mm)  
Aluminum “SuperTrough” — Basic Version

**For the following Series**

**System E4 Series:**
- 400/410/R880
- 4040/4140/R8840
- 14040/14140/R18840
- 14240/14340

**System E6 Series:**
- E6-62

| Ba | Outer E-Chain® width |
| Bi | Inner E-Chain® width |
| Ha | E-Chain® outer height |
| H Ri | Inner trough height |
| H Ra | Outer trough height |
| BRi | Inner trough width |
| BRa | Outer trough width |
| P Mon | # of installation sets (left/right) |
| P Ri | # of trough set (left/right) |

**Basic version: Aluminum "SuperTrough" components**

**Complete guide trough sets - description**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>974-30-SL</td>
<td>22.05 lbs</td>
</tr>
<tr>
<td>974-31-SL</td>
<td>28.22 lbs</td>
</tr>
<tr>
<td>960-30</td>
<td>.18 lbs</td>
</tr>
</tbody>
</table>

**Single parts - description**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>75-01</td>
<td>.13 lbs</td>
</tr>
<tr>
<td>75-68-H</td>
<td>.09 lbs</td>
</tr>
<tr>
<td>75-60</td>
<td></td>
</tr>
<tr>
<td>MAT 0040209</td>
<td></td>
</tr>
<tr>
<td>MAT 0040057</td>
<td></td>
</tr>
<tr>
<td>82-79</td>
<td></td>
</tr>
<tr>
<td>92-52-____</td>
<td>1.23 lbs/ft.</td>
</tr>
</tbody>
</table>

Supplement Part No. with the indicated C-profile-length-index.
**Example:** 960-30-150 C-profile-length-index for your chosen trough inner width BRi

**Number of installation sets which have to be installed**

$$n_{Mon} = n_{Ri} + 1$$

$$n_{Ri} \times 78.6 \text{ in. (1998 mm)}$$
Heavy Duty Version - Installation Set Part No. 974-50

- Components, trough "Heavy Duty":
  - Trough side parts, aluminum, 6.56 ft. (2m)
  - Glide bar, plastic, 6.56 ft. (2m)
  - Glide strips, plastic 6.56 ft. (2m)
    (without glide strips on request)
- Optional: Silencer profile, rubber
- Components, installation set "Heavy Duty":
  - C-profile, steel galvanized
  - Sliding nut M6
  - Heavy duty bracket, aluminum
  - Screw M6 x 25

Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing

For the "Heavy Duty" installation set:
Insert Part No. 974-50____ instead of 960-50____ on the right column "attached outwards"
Aluminum "SuperTrough"

For the following Series

**System E4 Series:**
- 5050/5150/R9850
- 15050/15150/R19850

**System E6 Series:**
- E6-80L
- E6-80

---

Aluminum "SuperTrough" for the following Series

**System E4 Series:**
- G 5050/5150/R9850
- G 15050/15150/R19850

**System E6 Series:**
- G E6-80L
- G E6-80

---

### Basic version: Aluminum "SuperTrough" components

**Complete guide trough sets - description**
- Part No.: 975-30-SL
  - Weight: 30.87 lbs
- Part No.: 975-31-SL
  - Weight: 36.60 lbs
- Part No.: 960-30
  - Weight: .18 lbs
- Part No.: 960-30-____

### Single parts - description

- Part No.: 75-01
  - Weight: .13 lbs
- Part No.: 75-68-H
  - Weight: .09 lbs
- Part No.: 75-60
- Part No.: MAT 0040209
- Part No.: MAT 0040057
- Part No.: 82-79
- Part No.: 92-52-____

Supplement Part No. with the indicated C-profile-length-index.

**Example:** 960-30-____ C-profile-length-index for your chosen trough inner width BRi

See table on the right or the respective page for chosen series

---

**Part No. 975-30-SL and 975-31-SL** Trough Height: 9.29 in. (236 mm)

**Aluminum “SuperTrough” — Basic Version**

---

**Components, trough:**
- Trough side parts, aluminum, 6.56 ft. (2m)
- Glide bar, plastic, 6.56 ft. (2m)
- Glide strips, plastic, 6.56 ft. (2m) (without glide bars on request)
- Optional: Silencer profile, rubber

**Components, installation set:**
- Bottom clamp, aluminum
- C-profile, steel galvanized
- Screw M6 x20
- Sliding nut M8
- Interface connector, plastic

---

**Length of the C-profile according to dimension BRi**

Length of C-profile see right page

---

**Bottom clamp attached optionally inwards or outwards**

---

**Number of installation sets which have to be installed**

- n = # of installation sets (left/right)
- nRi = # of trough set (left/right)

---

**Formula:**

\[
H_{Ri} \geq 2 \cdot ha \quad \text{or} \quad BRi \geq Ba + 4
\]
# Heavy Duty Version - Installation Set Part No. 975-50

## Aluminum "SuperTrough"

<table>
<thead>
<tr>
<th>BRI in. (mm)</th>
<th>Part No. attached inwards</th>
<th>Part No. attached outwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>05</td>
<td>4.09 (104)</td>
<td>960-50-225</td>
</tr>
<tr>
<td>06</td>
<td>4.68 (119)</td>
<td>960-50-250</td>
</tr>
<tr>
<td>07</td>
<td>5.08 (129)</td>
<td>960-50-275</td>
</tr>
<tr>
<td>10</td>
<td>6.06 (157)</td>
<td>960-50-300</td>
</tr>
<tr>
<td>11</td>
<td>6.57 (167)</td>
<td>960-50-325</td>
</tr>
<tr>
<td>12</td>
<td>7.05 (179)</td>
<td>960-50-350</td>
</tr>
<tr>
<td>13</td>
<td>7.56 (189)</td>
<td>960-50-375</td>
</tr>
<tr>
<td>15</td>
<td>8.03 (201)</td>
<td>960-50-400</td>
</tr>
<tr>
<td>16</td>
<td>8.54 (211)</td>
<td>960-50-425</td>
</tr>
<tr>
<td>17</td>
<td>9.03 (220)</td>
<td>960-50-450</td>
</tr>
<tr>
<td>19</td>
<td>9.53 (242)</td>
<td>960-50-475</td>
</tr>
<tr>
<td>20</td>
<td>10.00 (254)</td>
<td>960-50-500</td>
</tr>
<tr>
<td>21</td>
<td>10.51 (267)</td>
<td>960-50-525</td>
</tr>
<tr>
<td>22</td>
<td>11.00 (280)</td>
<td>960-50-550</td>
</tr>
<tr>
<td>23</td>
<td>11.50 (292)</td>
<td>960-50-575</td>
</tr>
<tr>
<td>25</td>
<td>13.00 (316)</td>
<td>960-50-600</td>
</tr>
<tr>
<td>26</td>
<td>13.50 (325)</td>
<td>960-50-625</td>
</tr>
<tr>
<td>27</td>
<td>14.00 (335)</td>
<td>960-50-650</td>
</tr>
<tr>
<td>28</td>
<td>14.50 (345)</td>
<td>960-50-675</td>
</tr>
<tr>
<td>29</td>
<td>15.00 (355)</td>
<td>960-50-700</td>
</tr>
<tr>
<td>30</td>
<td>15.50 (365)</td>
<td>960-50-725</td>
</tr>
</tbody>
</table>

For the "Heavy Duty" installation set:
Insert Part No. 975-50-____ instead of 960-50-____ on the right column "attached outwards"

- Components, trough "Heavy Duty":
  1. Trough side parts, aluminum, 6.56 ft. (2m)
  2. Glide bar, plastic, 6.56 ft. (2m)
  3. Glide strips, plastic, 6.56 ft. (2m)

- Optional: Silencer profile, rubber

- Components, installation set "Heavy Duty":
  1. C-profile, steel galvanized
  2. Sliding nut M6
  3. Heavy duty bracket, aluminum
  4. Screw M6 x 25

Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing

---

Heavy Duty Version - Installation Set Part No. 975-50

- Components, trough "Heavy Duty":
  1. Trough side parts, aluminum, 6.56 ft. (2m)
  2. Glide bar, plastic, 6.56 ft. (2m)

- Optional: Silencer profile, rubber

- Components, installation set "Heavy Duty":
  1. C-profile, steel galvanized
  2. Sliding nut M6
  3. Heavy duty bracket, aluminum
  4. Screw M6 x 25

Note: Dimensions similar to Basic version!
Exception: Heavy duty bracket, see drawing