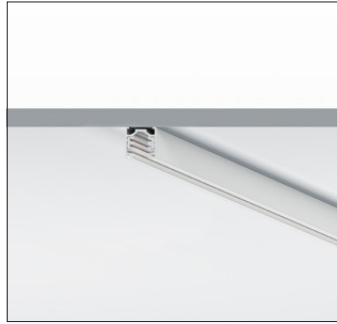


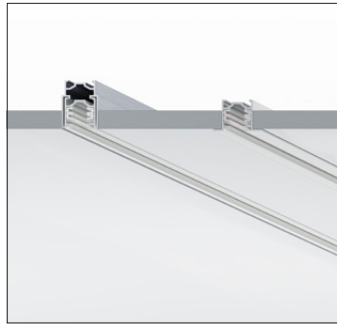


A guide for all lighting designers and technicians wanting to discover the possibilities of ERCO track



Surface mounting

7



Recessed mounting

10



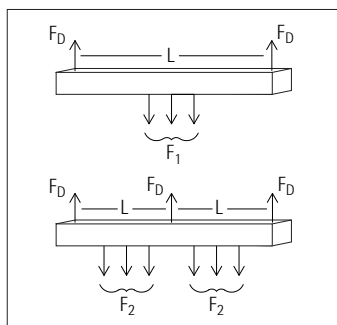
Pendant mounting

15



Electrical installation

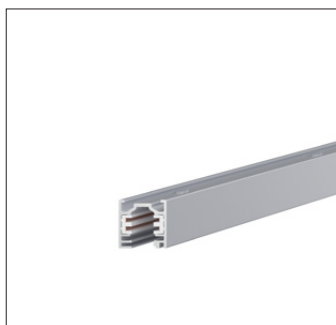
20



Static load

28

An overview of our track systems



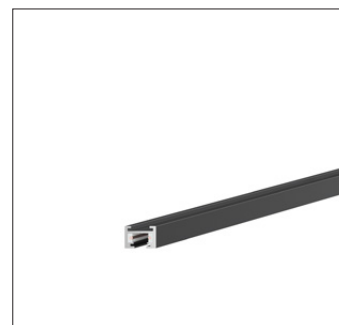
ERCO track, flanged track and singlet

Classic application
ERCO track is the flexible and sustainable infrastructure for spotlights, downlights, wallwashers and pendant luminaires. The track can be fixed to ceilings and walls and luminaires can be moved or replaced with ease.



ERCO Hi-trac and light structure

For higher loads
Hi-trac and light structures are a heavy-duty track infrastructure for suspending spotlights, downlights, wallwashers and pendant luminaires. The Hi-trac profiles with wide spans of up to 12ft are particularly recommended in rooms with just a few available suspension points. Two variants of the Hi-trac profile are available: either with an empty upper profile for further cable routing or with indirect luminaires for illuminating ceilings.

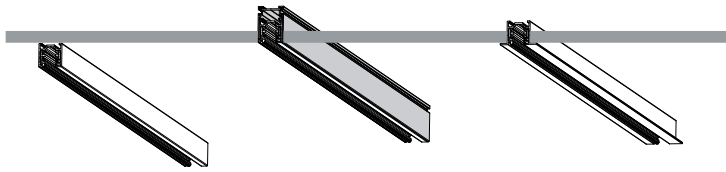


ERCO Minirail 48V track and singlet

Miniaturized infrastructure
With Minirail 48V, ERCO offers a miniaturized alternative to the classic ERCO track as the basis for flexible, space-saving lighting installations. Minirail 48V with a profile width of just 7/8" (22mm) is ideal for all situations requiring the smallest possible system dimensions, whether for aesthetic or technical reasons.

	Track and flanged track	Hi-trac	Minirail 48V
Versions	Track Flanged track Singlets	Track Track with indirect distribution luminaire	Track Singlet
Types of mounting	Surface-mounted Recessed flanged Recessed flush (with plaster trim profile) Pendant	Pendant	Surface-mounted Recessed flanged Recessed flush (with plaster trim profile) Pendant
Control options for luminaires	Switchable Phase dimmable Casambi Bluetooth 0-10V (via bridge) Zigbee DALI and DMX options on request	Switchable Phase dimmable Casambi Bluetooth 0-10V (via bridge) Zigbee DALI and DMX options on request	Switchable Casambi Bluetooth 0-10V (via bridge) Zigbee DALI and DMX options on request
Width x height	1 5/16" x 1 3/8" (33.5 x 34mm)	1 1/2" x 2 7/8" (38 x 72mm)	7/8" x 5/8" (22 x 16mm)
Length	4ft (1219mm) 8ft (2438mm) 12ft (3657mm) (can be shortened on site)	Track 8ft (2438mm) 12ft (3657mm) (can be shortened on site) Luminaire 6.5 ft (2000mm) with indirect distribution	3.28ft (1000mm) 6.56ft (2000mm) 9.84ft (3000mm) (can be shortened on site)
Accessories	Suspension equipment Plaster trim profile Connectors Mounting components Display hook	Suspension equipment Connectors Mounting components Display hook	Suspension equipment Plaster trim profile Connectors Mounting components

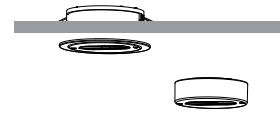
ERCO track system and accessories –
a manufacturer-independent global standard.



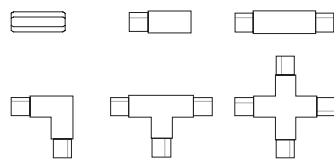
ERCO track can be mounted directly on ceilings, walls or even on cornices.

A plaster trim profile (accessory) turns a surface-mounted track into a flush-mounted track.

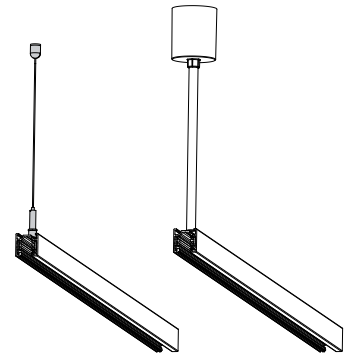
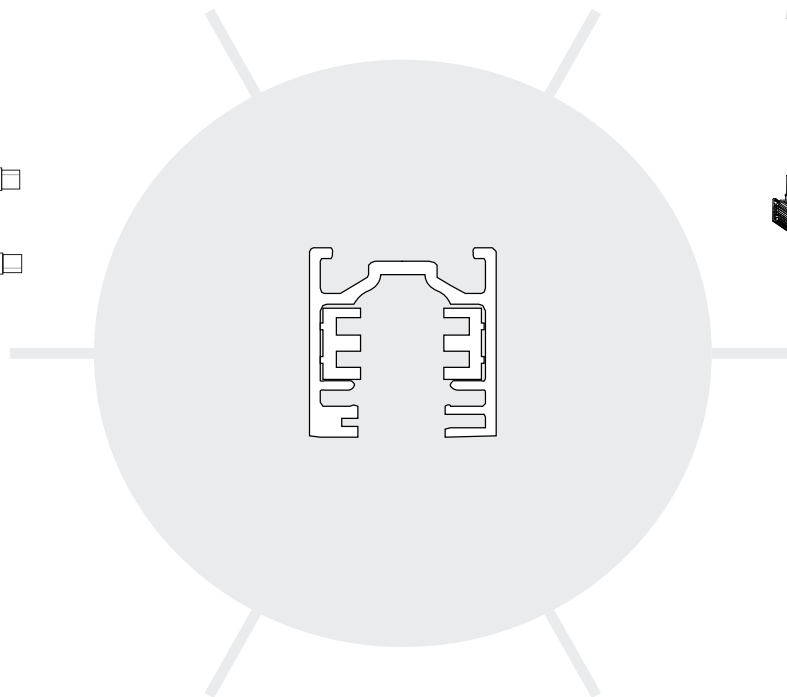
In the flanged track variant, you can use the track as a support for ceiling elements.



The track for a spotlight: the ERCO singlet.



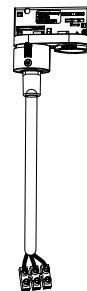
ERCO connectors
Provide power and enable all types of control.



Wire suspension or pendant tube (both available as accessories) transforms ERCO track into a suspended structure.



ERCO accessories
Decorative hooks extend the range of applications.



Adapter for pendant luminaires
Use our track as a high-quality infrastructure, and not only for ERCO luminaires. We supply turning adapters for pendant luminaires as OEM components to other luminaire manufacturers.

Benefit from a long-term investment



Proven, future-proof and manufacturer-independent
Track from ERCO has been used around the globe for decades. An important plus: new spotlights mechanically fit into existing systems and luminaires put in operation years ago can be used in new systems. ERCO also offers adapters as OEM components for any other luminaire manufacturer.

Extremely stable and durable
ERCO track is manufactured from high-quality aluminum at the ERCO light plant in Germany. Simply install lengths up to 12ft in a single piece. The spotlight adapters are similarly robust: designed for continuous use, they are not damaged by frequent insertion and removal.

Gain planning security



HCL

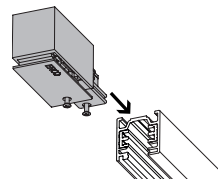


0-10V, Casambi Bluetooth, phase dimming or simply switch on and off?
ERCO track can be used to implement all common types of control. DALI or DMX options are available on request.

Support of Human-Centric Lighting concepts
Thanks to automated dimming and individual operation, the lighting can be flexibly controlled via the track. Motion sensors and control via Casambi Bluetooth make it possible to adjust lighting according to personal preferences.

Straight ahead, around the corner or as a geometric shape?
Design your track system without restrictions: L-, X-, T- and flexible connectors enable diverse geometries. Suitable components are specified as accessories on the data sheet of the track.

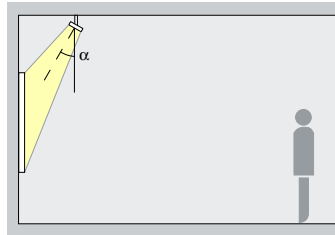
Save time and effort through simple mounting



Simply cut to size and install on site
ERCO track is easily cut to size to the nearest millimeter on site using a miter saw. There is no risk of damaging the conductor paths in the process.

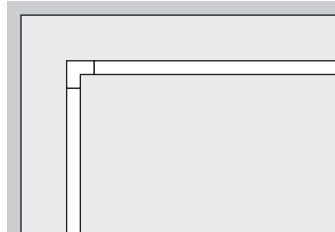
Simple mounting
Pre-wired connectors allow quick and easy installation on site. Mechanical coding prevents components from being incorrectly fitted together.

**Step 1:
The right arrangement**



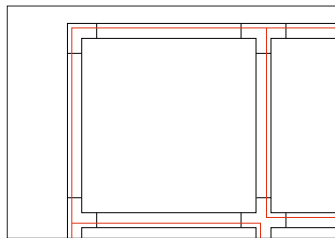
In museums and galleries, track usually runs parallel to the walls. For uniform wallwashing, you can apply approx. one third of the wall height as wall spacing; for accent lighting, the 30° museum angle helps with positioning. In offices, the track often runs parallel to the alignment of the desks.

**Step 2:
Plan the layout and determine the type of track**



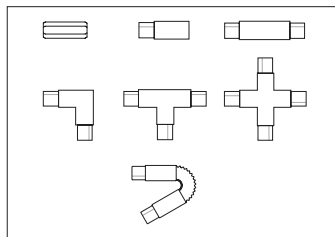
Draw the track layout in the reflected ceiling plan of the room. Give the track a visible width so that you can draw in the protective conductor routing later. If the track has to be integrated into a ceiling system, you can also use ERCO flanged track as an alternative to the track.

**Step 3:
Draw in the protective conductor**



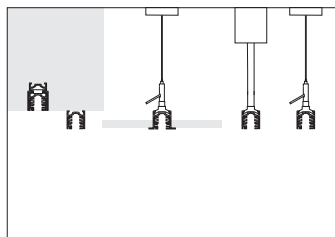
All live ends and connectors are mechanically coded so that routing of the earth ground is always ensured. Draw in the earth ground in your plan, e.g., as a red line, to select the correct live ends and connectors later.

**Step 4:
Plan the live ends and connectors**



Divide the track into segments depending on length and geometry. Please also observe the maximum electrical load (see p. 23). Live ends and connectors are available with right and left or inside and outside earth ground routing (see p. 20). Live ends, couplers, L- and T-connectors are also available with mounting plate.

**Step 5:
Select accessories for the type of mounting**



Determine the mounting method of the track and thus also the necessary accessories. Using accessories, such as plaster trim profiles or pendant suspensions, allows various mounting solutions to be implemented. Take into account the mechanical load on the system (see p. 25).

**Step 6:
Specify the components**

Parts list for flush rectangular geometry in a drywall ceiling

Number	Quantity	Description
1	4	Track
3	4	L-connector outside
4	4	Plaster trim profile
5	8	Suspension
6	8	Toggle

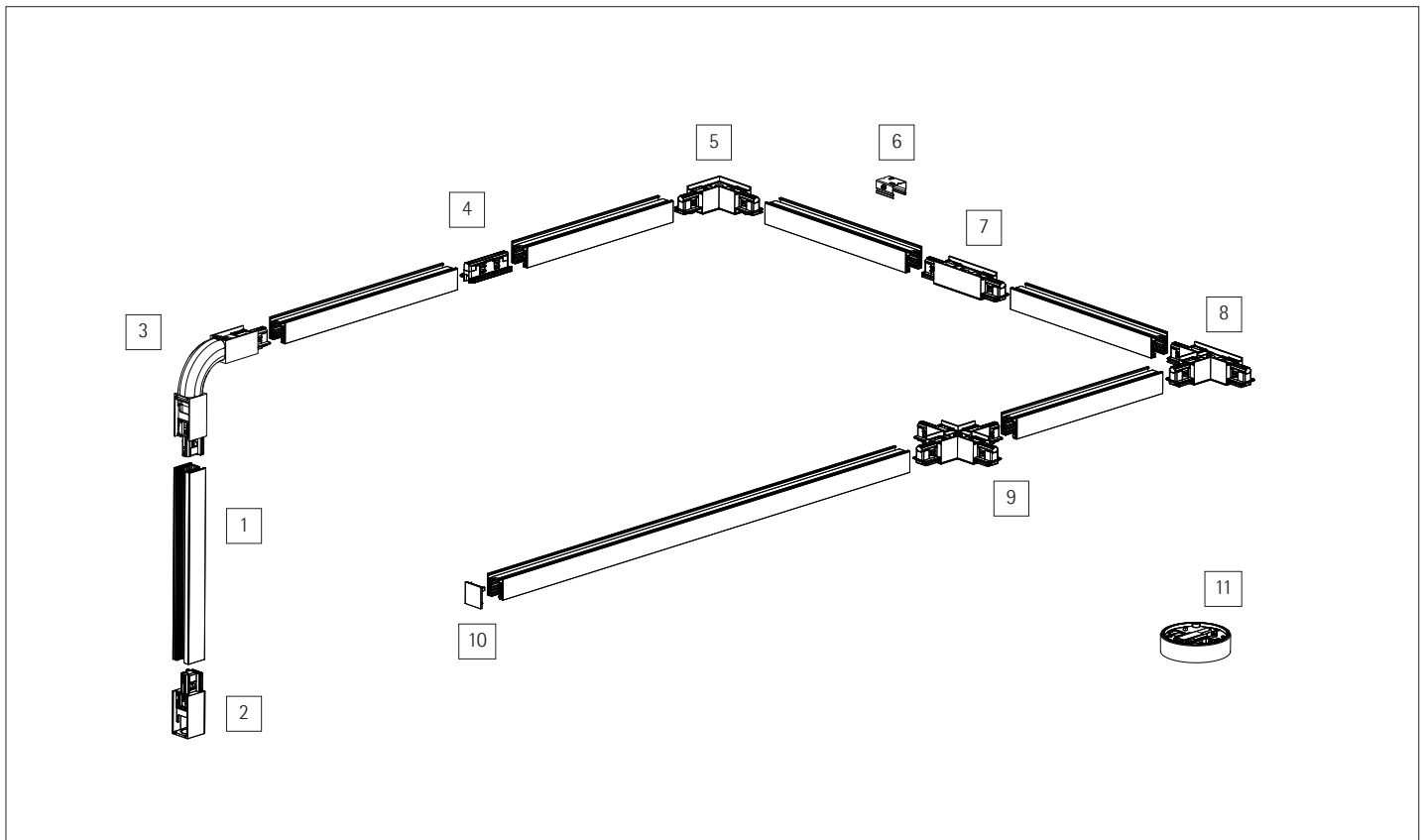
Enter the selected parts into a parts list. The accessories matching the track are specified on the data sheet of the track. The parts list and the planned track layout are an important basis for subsequent installation!

Surface mounting

Surface mounting is the most common mounting method and is suitable for most surfaces. Special color coatings are also possible to integrate the track perfectly into the ceiling design. The planning aid for surface mounting supports you in the planning and installation of a surface-mounted system and provides valuable tips. Many hints also apply for the other mounting methods! Please also note the information on selection and connection of the connectors.



Overview of available components for surface mounting



- | | |
|---------------------------------------|------------------------|
| 1 Track | 7 Coupler, center feed |
| 2 Live end* | 8 T-connector* |
| 3 Multiflex coupler | 9 X-connector* |
| 4 Coupler for flush track connections | 10 End plate |
| 5 L-connector* | 11 Singlet |
| 6 Fastening clip | |
- * available with or without mounting plate

Surface mounting

Sample installations

As examples, we have put together three common sample installations for you. In simple linear systems, routing of the protective conductor only plays a subordinate role and only influences the mounting direction of the luminaire. When using several connectors, you need to coordinate them with regard to the red marked protective conductor routing.



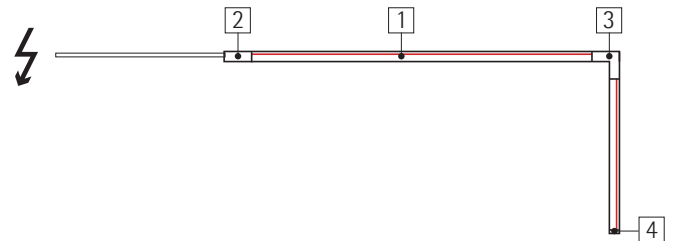
Parts list for linear design

Number	Quantity	Description
1	1	Track
2	1	Live end right
4	1	End plate



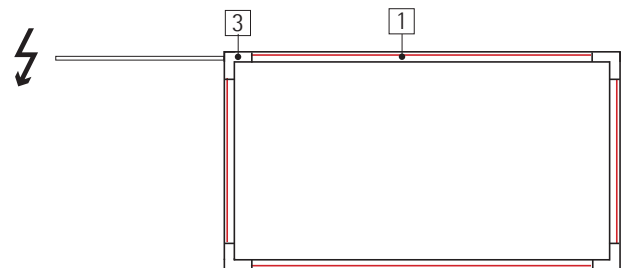
Parts list for L-design

Number	Quantity	Description
1	2	Track
2	1	Live end right
3	1	L-connector outside
4	1	End plate

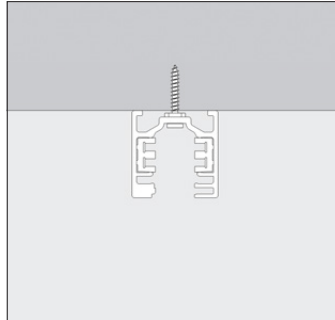


Parts list for rectangular design

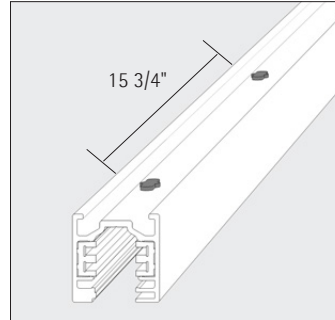
Position	Quantity	Description
1	4	Track
3	4	L-connector outside



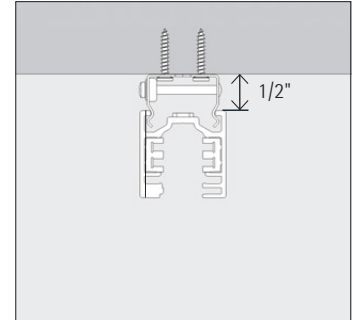
Installation planning for direct mounting and fixing clip



Surface mounting
To avoid mechanical stress on track connectors, fasten the track at its ends. Further fixing points may be necessary depending on the load and length. For this purpose, slotted holes are pre-punched at intervals of 1 5/16ft (0.4m). In the case of screw fastening, a distance of 2" (50mm) from the track ends must be maintained so that the connector can still be assembled.

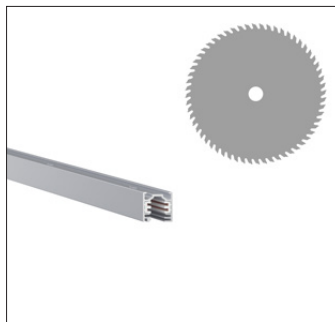


Tip for installation: the shape of the pre-punched holes in the track allows the screw to be screw-fastened halfway into the ceiling and the track to then be placed on top. This is especially helpful if the track is installed by one person. The screw head should have a diameter of max. 5/16" (8mm). Only plan with cylinder head screws or half round head screws.

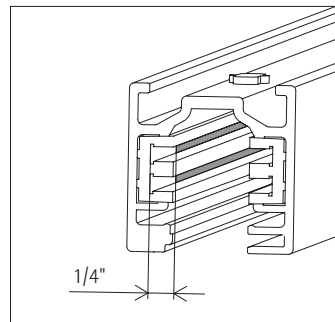


Mounting with fixing clips
The optional fixing clip (accessory) enables fixing on uneven surfaces, e.g. raw concrete ceilings. You can use it to compensate for unevenness of up to 1/2" (14mm) in height. Position the fixing clips at the track ends and, depending on the load, between the connectors.

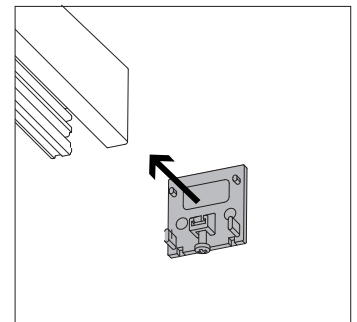
General planning and installation information



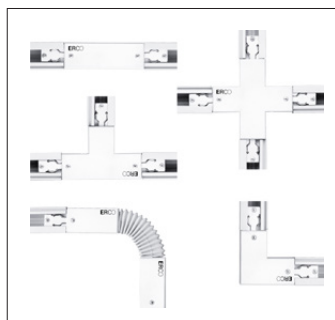
Shortening the track
You can order track cut to size. In many cases, however, it is advisable to shorten standard lengths directly on site, e.g., with a miter saw. Make the cut square and clean so that there are no unsightly gaps at the joints.



Shortening the conductors
After cutting the track, always shorten all four conductors in the track by 1/4" (5mm) for safety reasons. The appropriate tool for this is available as an accessory.



Using end plates
Always fit an end plate to the open end of a track for both safety and visual reasons.



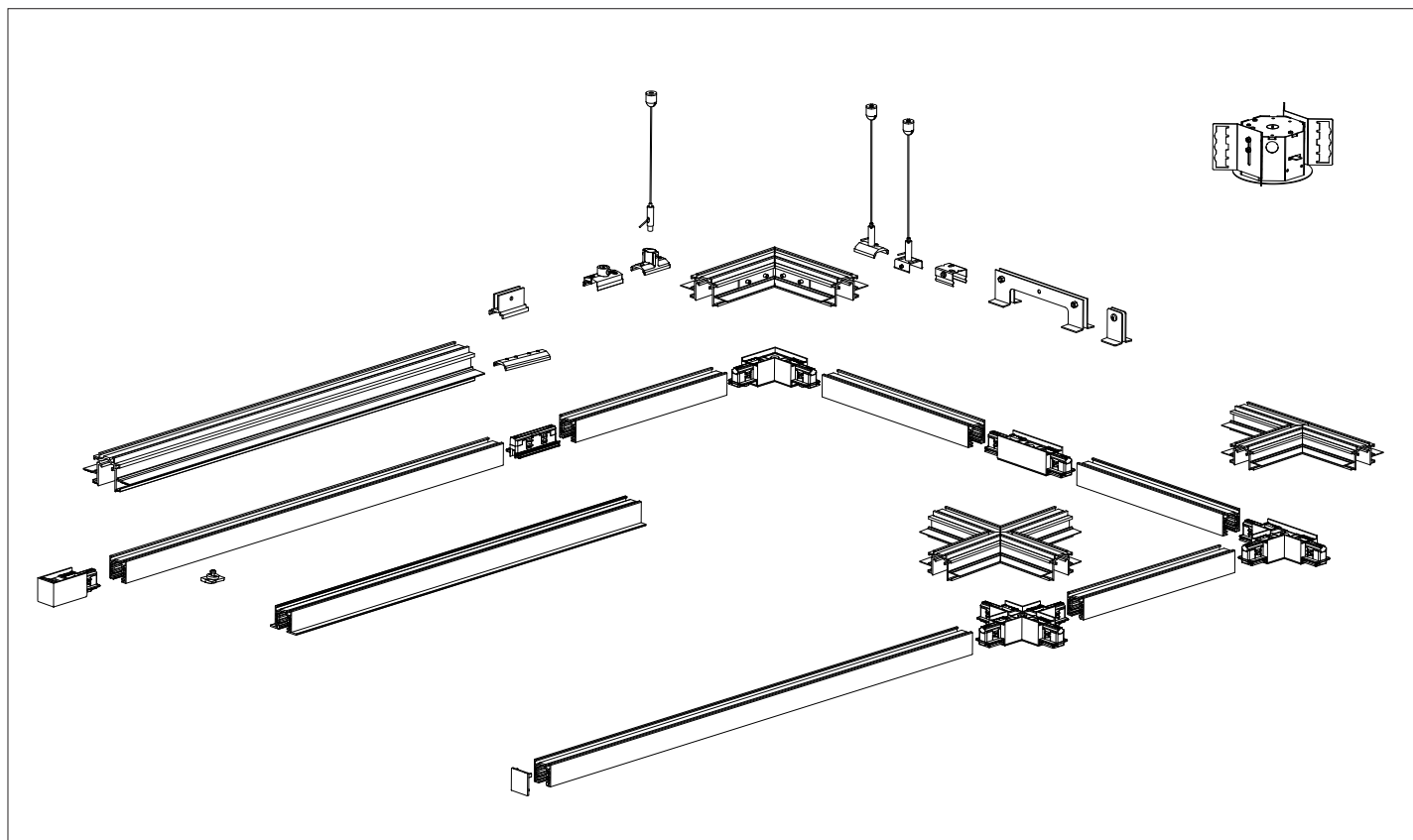
Using connectors
Connectors must not bear any mechanical load. Always provide fixing points in front of and behind couplers, connectors or at track ends. Depending on length and planned weight load, provide additional fixing points. See load diagrams for indications (see p. 25) Use connectors, couplers and/or live ends with mounting plate if installing them over a cable outlet box. Use connectors, couplers and/or live ends with mounting plate if installing them over a cable outlet box.

Recessed mounting

Recessed mounting allows for elegant installation of the track in the ceiling or wall. This is usually carried out using a plaster trim profile (accessory). This and other recessed mounting variants can be found in the corresponding sections. The flanged track is designed for recessed mounting. Their flanges serve as support surfaces for ceiling tiles and, as a covering edge, can also conceal the ceiling cut-out. When planning, always coordinate with the trades involved, such as drywall or concrete construction.



Overview of available components for recessed mounting



- | | | | | | | | |
|---|----------------------|----|------------------------|----|-------------------------------|----|------------------------------------|
| 1 | Live end | 8 | T-connector | 15 | Plaster trim X-profile | 22 | Wire rope suspension |
| 2 | Track | 9 | X-connector | 16 | Junction | 23 | Wire rope suspension (direct) |
| 3 | Flanged track | 10 | End plate | 17 | Mounting device (retroactive) | 24 | Wire rope suspension (retroactive) |
| 4 | Coupler | 11 | Plaster trim profilr | 18 | Mounting device (direct) | 25 | Singlet |
| 5 | Mechanical bridge | 12 | Toggle (Set 3 pcs.) | 19 | Fixing clip | | |
| 6 | L-Connector | 13 | Plaster trim L-profile | 20 | Suspension bridge | | |
| 7 | Coupler, center feed | 14 | Plaster trim T-profile | 21 | Suspension device for tracks | | |

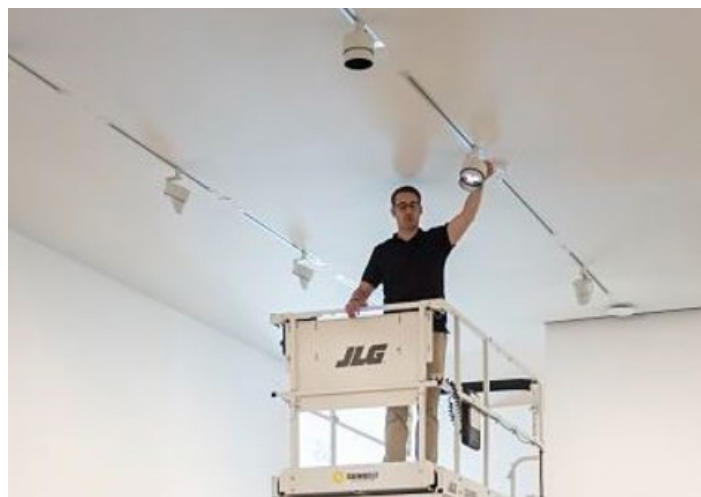
Recessed mounting

Sample installations

As examples, we have put together three common sample installations for you. In simple linear systems, routing of the protective conductor only plays a subordinate role and only influences the mounting direction of the luminaire.

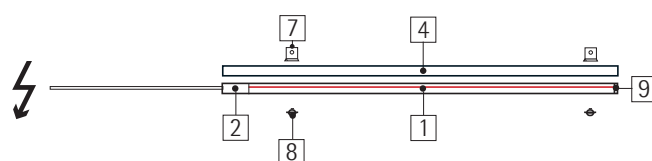
As soon as you use several connectors, you need to coordinate them with regard to the red marked protective conductor routing.

The number of fixing points depends on the specific size and load of the system. The information below shows a minimum configuration.



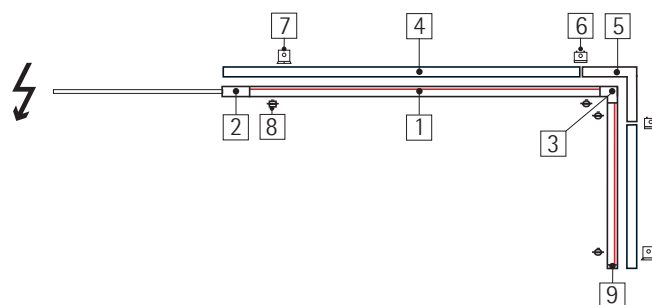
Parts list for flush linear recessing in a drywall ceiling

Number	Quantity	Description
1	1	Track
2	1	Live end right
4	1	Plaster trim profile
7	2	Suspension device for tracks
8	2	Toggle
9	1	End plate



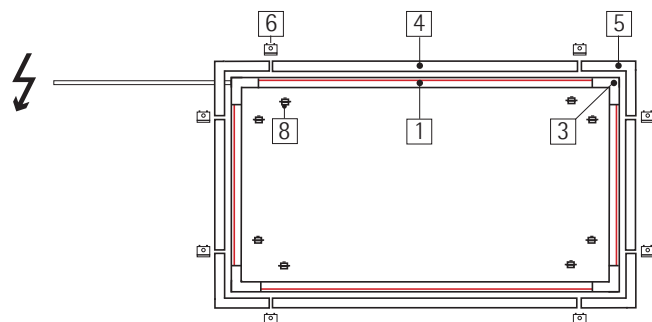
Parts list for flush L-installation in a drywall ceiling

Number	Quantity	Description
1	2	Track
2	1	Live end right
3	1	L-connector outside
4	2	Plaster trim profile
5	1	Plaster trim L-profile
6	2	Junction
7	2	Suspension device for tracks
8	4	Toggle
9	1	End plate



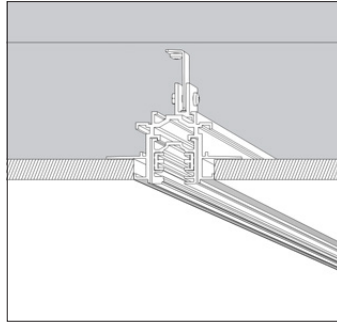
Parts list for flush rectangular geometry in a drywall ceiling

Number	Quantity	Description
1	4	Track
3	4	L-connector outside
4	4	Plaster trim profile
5	4	Plaster trim L-profile
6	8	Junction
8	8	Toggle



What should be considered during planning and installation

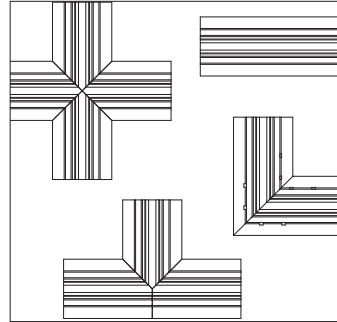
Drywall ceiling suspended



Flush installation with plaster trim profile and slotted iron

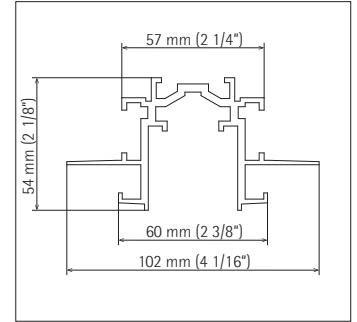
The plaster trim profile (accessory) is suitable for flush mounting. In terms of separating the trades, the plaster trim profiles can be installed by the drywall contractors whilst the electrical contractor only has to install the power cable beforehand. In this way, the track is protected from soiling caused by cleaning and grinding work.

For a secure hold, you should attach the plaster trim profile with slotted irons or similar fastening material that is available and approved on site. Suspensions (accessories) are available for the mounting, and the track is fastened in the plaster trim profile with toggles (accessories).



Create complex structures with plaster trim profiles

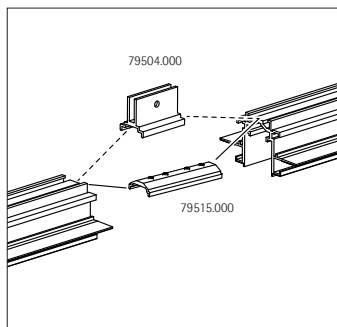
With the linear, the L-T or X-shaped profiles, you can also install more elaborate track systems flush with the ceiling.



Measurements

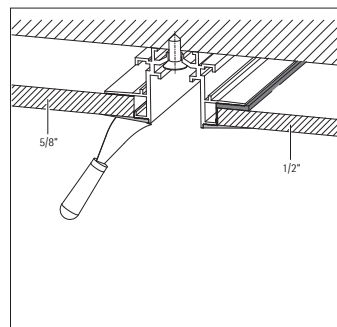
Linear profile	8ft
L-profile	8" x 8"
T-profile	8" x 12"
X-profile	12" x 12"

Linear plaster trim profiles may be shortened with a mitter saw on site. Don't forget to consider the measurements of the live-end and the electrical connectors.



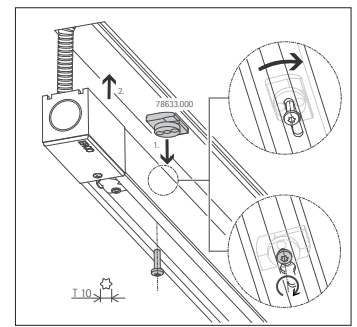
Connect plaster trim profiles

plaster trim profile or attach the L-, T- or X-profiles to each other with the mechanical bridge; optionally, you can also use the junction for this purpose.



Integrating plaster trim profile

The plaster trim profile has a fixing option for 5/8" or 1/2" drywall panels. For the electrical connection, a hole must be provided on site for connection of the protective tube.

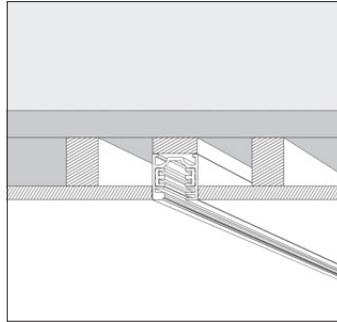


Installing the track

The track system with the electrical connectors is fastened in the plaster trim profile via toggles (3 per 1 m/yard) that can be ordered separately.

What should be considered during planning and installation

Mounting on substructure

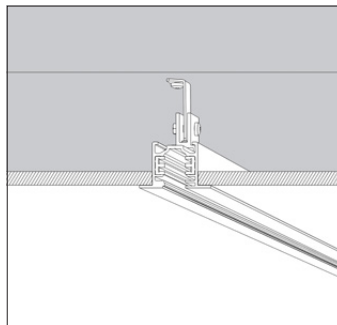


Mounting on substructure

For these ceiling types it is recommended to mount the track directly on the substructure. Suspensions are not needed in this case. In this case, mounting is the same as for surface mounting. You can also use the plaster trim profile. In this way you avoid soiling of the track. Please also note the information for installation in drywall ceilings.

Tip: the fixing clips are also suitable for fastening the plaster trim profiles as well as the track.

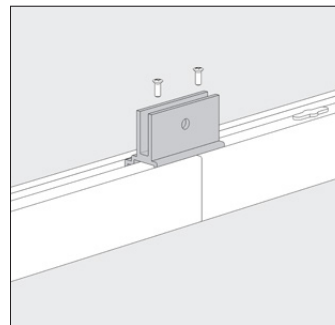
Grid ceiling, system ceiling



Flexible use of the ERCO flanged track

The flanged track is a special version of the ERCO track. The two flanges serve as a support surface for ceiling tiles. You can fasten the flanged track with on-site suspensions of the grid ceiling system or also with slotted irons. Alternatively, you can also use ERCO wire rope suspensions. Make sure that the flanges don't bear the weight of the ceiling and that the relevant codes are applied.

However, bear in mind that the track must be held in place by a raised ceiling plate when inserting a luminaire.

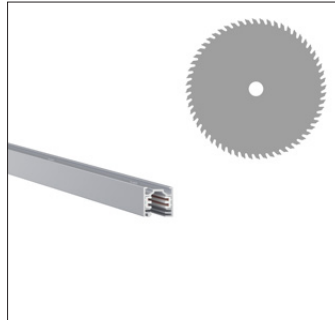


Extending the track

If you need to lengthen a track, use the coupler for flush mounting and place the junction 79504 over the joint. This ensures that the coupler is not mechanically stressed, and at the same time you still have a fixing point to which you can attach on-site suspensions.

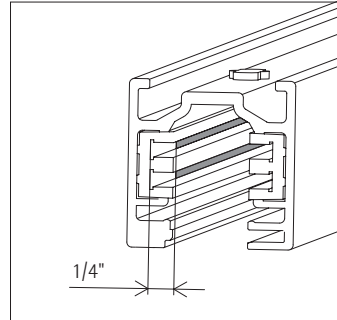
What should be considered during planning and installation

General planning and installation information



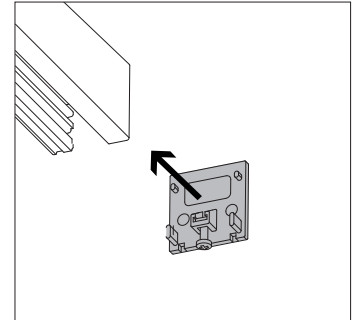
Shortening the track

You can order track cut to size. In many cases however it is advisable to shorten standard lengths directly on site, e.g. with a miter saw. Make the cut square and clean so that there are no unsightly gaps at the joints.



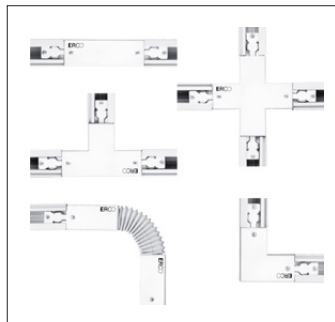
Shortening the conductors

After shortening the track, always shorten all four conductors in the track by 1/4" (5mm) for safety reasons. The appropriate tool for this is available as an accessory.



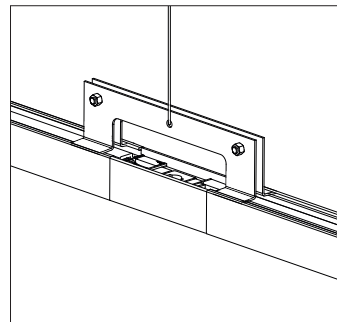
Using end plates

Always fit an end plate to the open end of a track for both safety and visual reasons.



Using connectors

Connectors must not bear any mechanical load. For this reason always provide fixing points in front of and behind live ends, connectors or the track ends. Depending on the length and planned weight load, provide additional fixing points.



Using suspension bridges

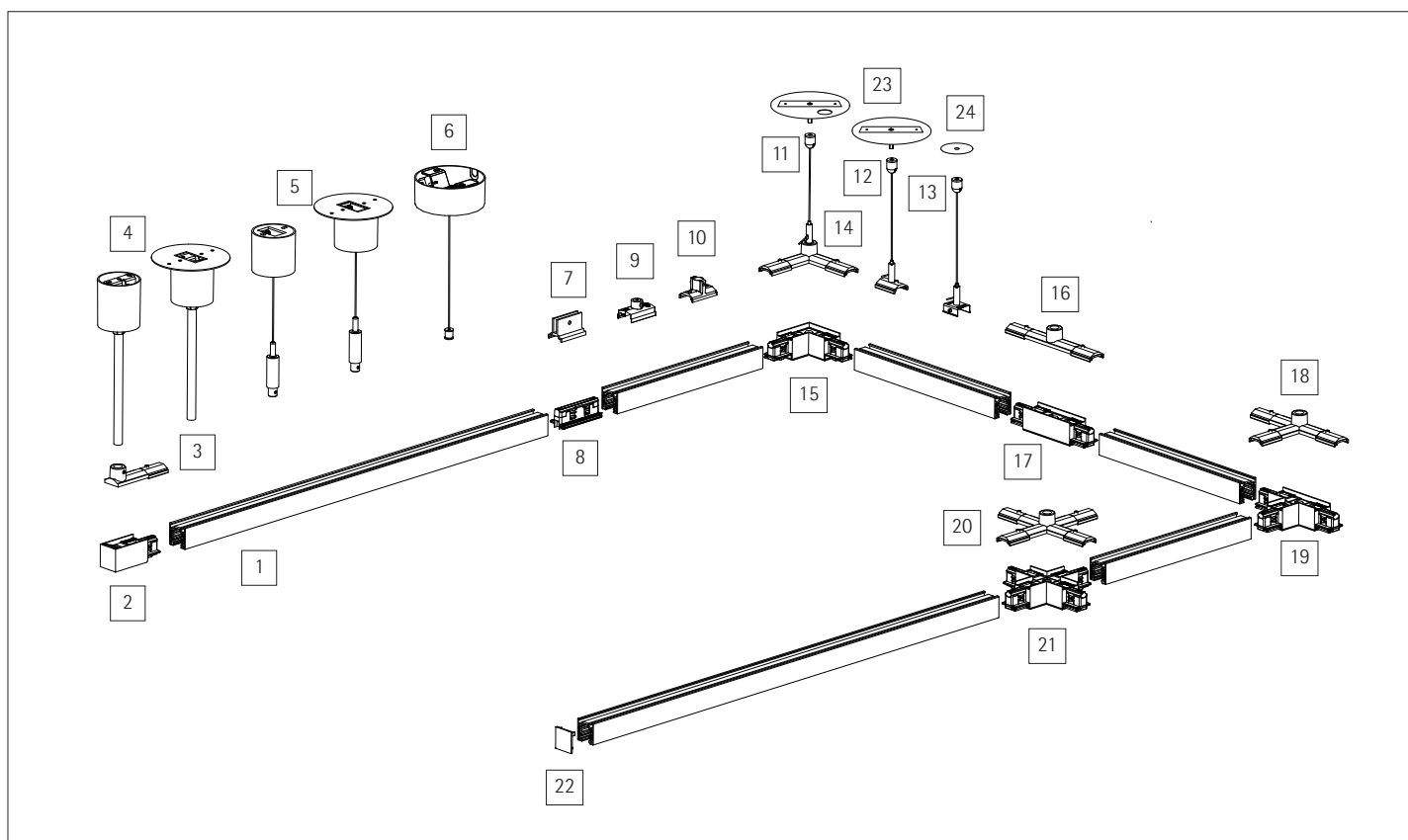
The suspension bridge with a span of 4" (10 cm) is suitable for couplers (also called 'centre feed').

Pendant mounting

Pendant mounting is a good solution for high rooms or for rooms with irregular ceiling heights, e.g., vaulted ceilings. Several options are available, which you can find in this section.



Overview of available components for pendant mounting



- | | | | |
|---|---|---|--|
| 1 Track | 7 Junction | 13 Wire rope suspension (retroactive) | 19 T-connector |
| 2 Live end | 8 Coupler | 14 Mounting device for L-connector | 20 Mounting device for X-connector |
| 3 Mounting device for Live end | 9 Mounting device (retroactive for wire rope) | 15 L-connector | 21 X-connector |
| 4 Pendant tube suspension with/without mounting plate | 10 Mounting device (direct) | 16 Mounting device for coupler, center feed | 22 End plate |
| 5 Wire rope suspension with/without mounting plate | 11 Wire rope suspension | 17 Coupler for center feed | 23 Canopy (cover) 5" for junction boxes with / without cable entry |
| 6 Wire rope suspension | 12 Wire rope suspension (direct) | 18 Mounting device for T-connector | 24 Canopy (cover) 2" for wire rope suspensions |

Pendant mounting

Sample installations

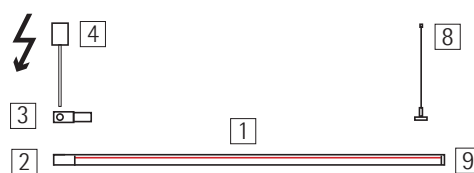
As examples, we have put together three common sample installations for you. In simple linear systems, routing of the earth ground only plays a subordinate role and only influences the mounting direction of the luminaire. When using several connectors, you need to coordinate them with regard to the red marked earth ground routing.

The number of fixing points depends on the specific size and load of the system. The information below shows a minimum configuration.



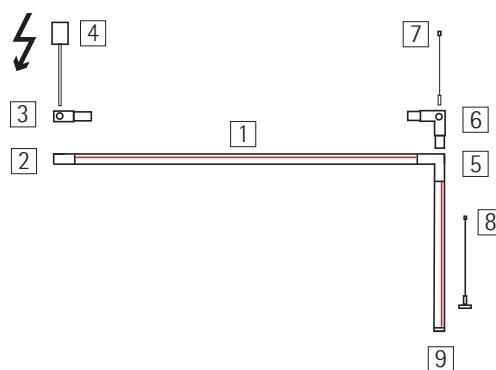
Parts list for linear pendant mounting

Number	Quantity	Description
1	1	Track
2	1	Live end right
3	1	Mounting device for Live end
4	1	Pendant tube suspension
8	1	Wire rope suspension with mounting device
9	1	End plate



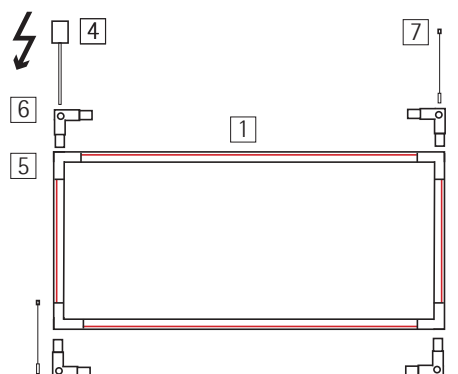
Parts list for angled pendant mounting

Number	Quantity	Description
1	2	Track
2	1	Live end right
3	1	Mounting device for Live end
4	1	Pendant tube suspension
5	1	L-connector outside
6	1	Mounting device for L-connector
7	1	Wire rope suspension
8	1	Wire rope suspension with mounting device
9	1	End plate



Parts list for rectangular pendant mounting

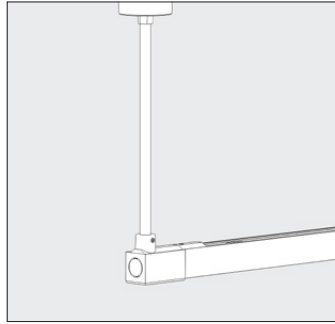
Number	Quantity	Description
1	4	Track
4	1	Pendant tube suspension
5	4	L-connector outside
6	3	Mounting device for L-connector
7	3	Wire rope suspension



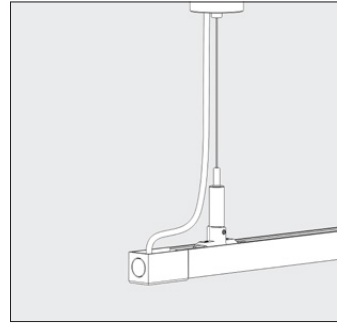
Pendant mounting

Pendant tube or wire?

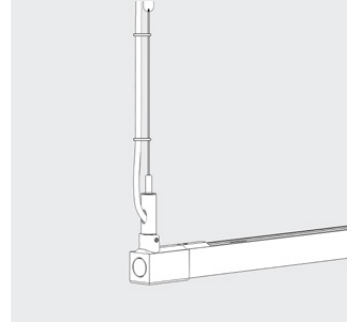
With suspended track installations, a dynamic load must be taken into account in addition to the static load. A draft for example can move the system. Asymmetric loads, e.g., caused by spotlights aligned to one side, can cause the track to tilt slightly, especially with linear systems. With a pendant tube suspension you bring stiffness into the system and prevent such effects. All canopy suspensions are also available with mounting plate. These can be mounted over cable outlet boxes.



Live end with pendant tube
Pendant tube suspensions enable power supply of the track system without visible cables. They are suitable for both 3-pole and 5-pole connections.



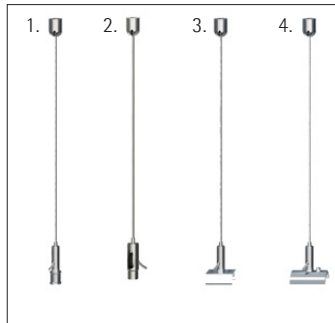
Feed with wire rope suspension and canopy
With wire rope suspensions, the connection is made via the canopy. The opening in the base of the canopy allows the connection cable to be fed through to the track.



Feeding with wire rope suspension and cable gland.
These wire suspensions allow the connection cable to be inserted directly into the connector/live end.. via the rapid connector. You can attach the cable to the wire rope using the clips provided.

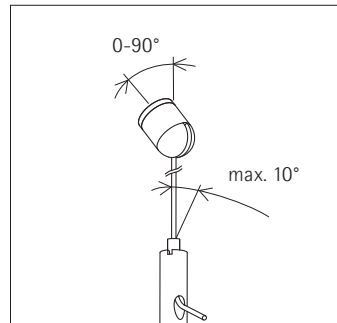
Wire rope suspensions with point fixing

These suspensions are characterized by a discreet visual appearance.

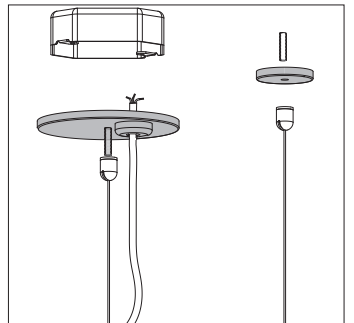


- Versions**
1. with rapid connector for fixing to mounting devices.
 2. with rapid connector and cable gland for cables up to $\varnothing 3/8"$ (9.3mm). Supplied with 6 fixing clips for the cable
 3. with pre-assembled fixing clip for retrofitting on the track
 4. with mounting device for direct mounting on the track

The length of the wire rope is 98" (2500mm). Longer lengths are available on request.
For mounting versions 1 and 2, you need a separate mounting device.

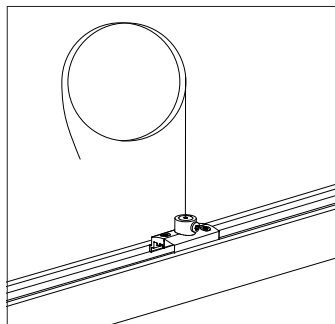


Mounting on sloping ceiling
All single-point suspensions are suitable for sloping ceilings up to 10degrees. Rapid connectors ensure tool-free and particularly simple height adjustment.



Mounting on junction boxes
With the appropriate accessories, the wire suspensions can also be mounted on a junction box. Depending on the design, the 5" accessories are suitable for feeding. The cable cross section must be between 9.5 and 11mm (0.370" and 0.430"). The small 2" canopy can be used for covering the fixation point of the wire rope suspensions.

Special room and mounting situations



Using an additional wire
For special room situations, the ERCO accessories range includes the wire and turnbuckle. You can mount these on the track with the mounting device 78652.000/ 78651.000 for retroactive suspension. This mounting device is specially designed for mounting a wire. The turnbuckle allows fine adjustment of the suspension.

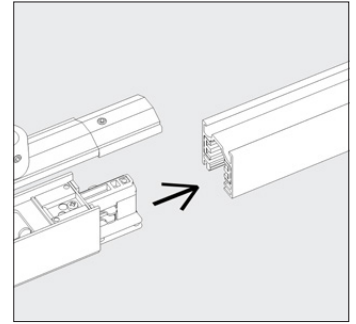
Pendant mounting

Fixing pendant accessories to the connector



Using mounting devices for connectors

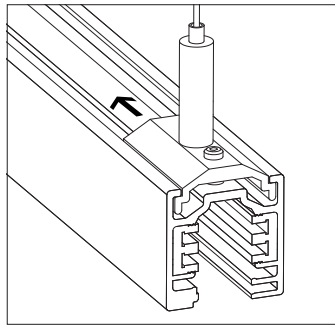
Track connectors must not bear any mechanical load. Mounting devices are available to support such loads. With the mounting devices, you reduce the number of fixing points required to one fixing point per connector.



Installation

Mounting devices above the connectors must always be mounted together with the connectors.

Fixing pendant accessories to the track

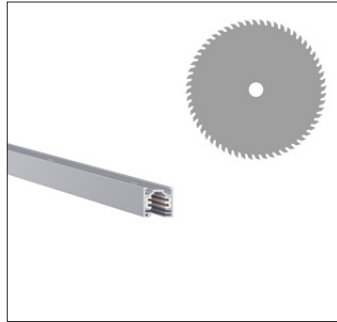


Using mounting devices for track

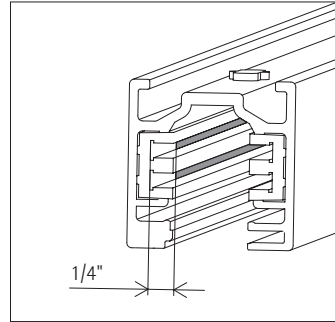
In addition to mounting devices for fastening to the connector, mounting devices for fastening to the track are also available. Use these mounting devices if, due to static reasons, fastening only to the connectors is not sufficient. Slide these mounting devices into the track profile before mounting the connector. For special architectural situations, you can use the mounting device for retrofitting with the wire and turnbuckle accessories.

Pendant mounting

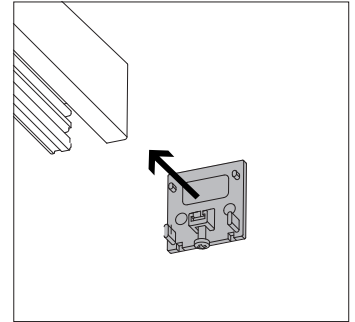
General planning and installation information



Shortening the track
You can order track cut to size. In many cases however it is advisable to shorten standard lengths directly on site, e.g. with a miter saw. Make the cut square and clean so that there are no unsightly gaps at the joints.



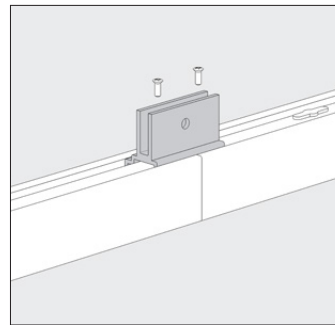
Shortening the conductors
After shortening the track, always shorten all four conductors in the track by 1/4" (5mm) for safety reasons. The appropriate tool for this is available as an accessory.



Using end plates
Always fit an end plate to the open end of a track for both safety and visual reasons.



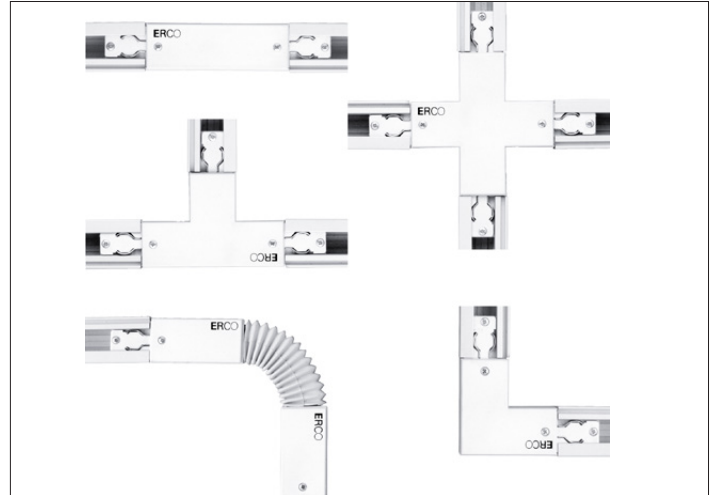
Using connectors
Connectors must not bear any mechanical load. Therefore, always provide fixings in front of, above or behind connectors and at the track ends. Depending on the length and planned weight load, plan additional fixing points. Indications for this are contained in the load diagrams in the "Static load" section of this document.



Extending suspended track
If you need to lengthen a track, use the coupler for flush mounting and place the junction 79504 over the joint. This ensures that the coupler is not mechanically stressed, and at the same time you still have a fixing point to which you can attach on-site suspensions. Alternatively, you can also use the mounting devices 78670 / 78671 for suspending a track.

Electrical installation

The track profile of ERCO track, ERCO flanged track and ERCO track used in Hi-trac are all identical. The decisive factor for the control options is the selection and connection of the connectors in combination with the appropriate adapters and luminaires. ERCO track is suitable for 2-circuits, with separate hot and neutrals, each rated 20amp. This section contains information on protective conductor routing, the electrical connection and adapter types.



Good to know:
In addition to the Live ends, connectors and couplers also offer the option to feed your ERCO track system.

Operating mode	Circuits	Controls supported
2-circuit	2 (with separate hot and neutral)	Switchable Phase dimmable On-board Dim Casambi 0-10V (via 0-10V-Casambi Bridge)

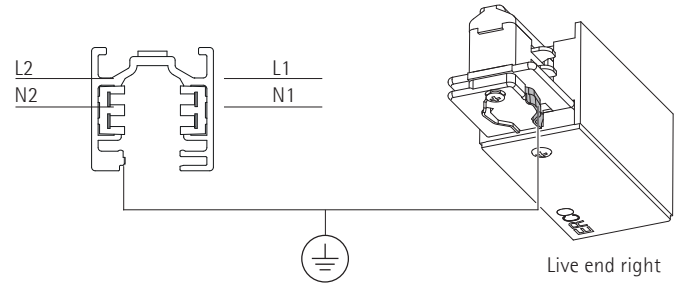
Electrical installation

Earth ground routing and alignment of the track

For simple, safe mounting, ERCO tracks are coded via the routing of the earth ground. This also applies to the L- and T-connectors as well as the live end, which are available in a left and a right version according to their geometry.

The L2 and N2 conductors are always on the side of the earth ground. This means a connector cannot be plugged on incorrectly and no short circuit can occur.

Tip: in the case of simple, linear track only, plug the live end onto the track during mounting. This will ensure that the live end is on the correct side of the track later.



Right or left?

How to clearly identify the required connector.

Live end

The definition 'right' or 'left' is made looking from the track to the live end.



Live end right

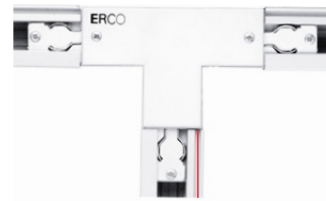


Live end left

T-connector

In the case of the T-connector, the definition 'right' or 'left' is made by looking from the continuous side of the T-connector to the track.

For T-connectors directly opposite each other, always plan for a left and a right connector.



T-connector right



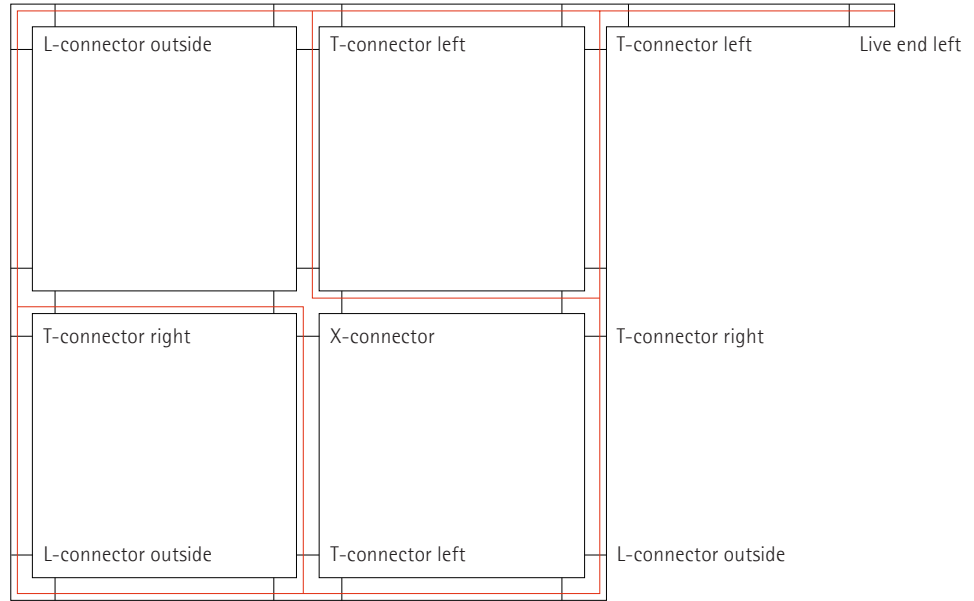
T-connector left

X-connector

When using the X-connector, note that this reverses the protective conductor routing.



Planning connectors

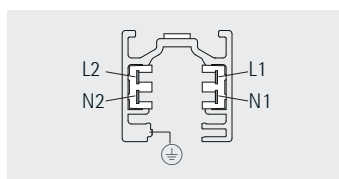


1. First sketch the track system in top view with all track and connecting parts and without earth ground. Give the track and connectors a width that allows you to add the protective conductor routing in the next step.
2. Now draw in the earth ground, e.g., as a red line. Start on the long side of a T-connector (if used) and draw the earth ground as a continuous connection.
3. Note the specific earth ground routing with the X-connector.
4. Now define all necessary connectors.

Connection

In terms of electrical planning, track and flanged track are the same. ERCO track can be operated in the 2-circuit 120V network and the phase is selected by rotation of the complete luminaire.

1/2-circuit operation



Connection

- L1 Load circuit 1
- N1 Neutral conductor 1
- L2 Load circuit 2
- N2 Neutral conductor 2
- PE Protective conductor

Supported control types

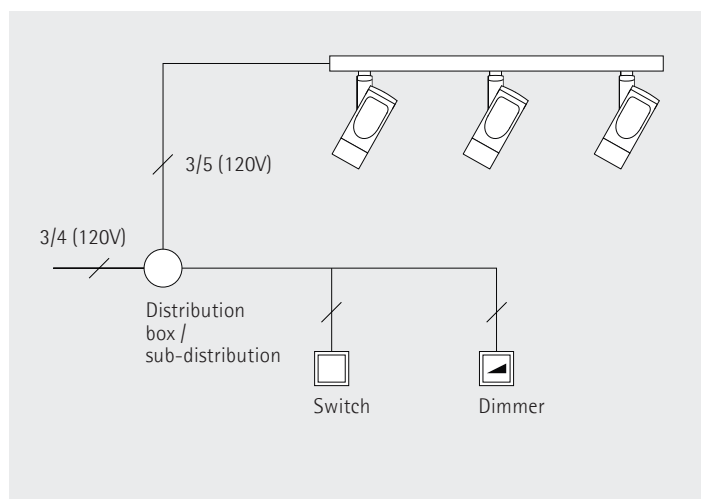
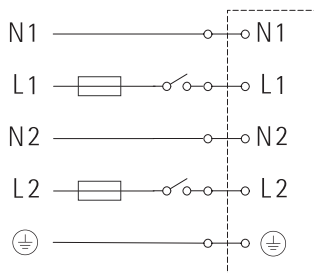
- Switchable
- On-board Dim
- Phase dimmable
- Casambi Bluetooth
- 0-10V (with bridge)
- DALI or DMX control options on request

Suitable adapters

- 2P adapter
- 2P turning transadapter

120V / 60Hz

max. 20A



Notes on installation:

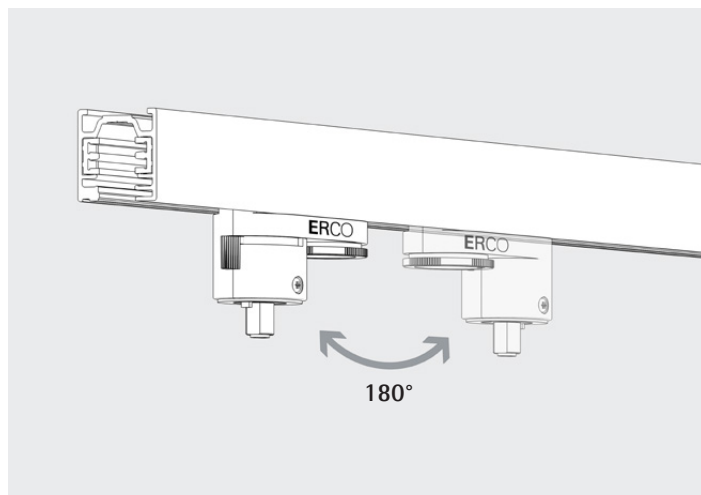
- Take into account conductors of the track with a cross-section of approx. AWG12 (4mm²).
- The connection terminals of the live ends or connectors can each accept two conductors with a cross-section of up to AWG 14 (2.5mm²). Through-wiring is thus possible.
- The connectors do not have strain relief. If required, this should be provided on site e.g., with a suitable screw connection.
- The live end has a cable entry from the side and an entry from the top. The connectors can only be fed from above.

Electrical

Adapters for ERCO track and flanged track used on ERCO luminaires

All ERCO adapters are mounted in the track without tools. The necessary electrical connection of the track differs according to the control type of the luminaire.

Circuit selection is possible by turning the adaptor (luminaire) by 180°.



Adapter types



2-circuit turning adapter

2-circuit adapters establish the electrical and mechanical connection to the luminaire. Luminaires with this adapter are suitable for mounting in the ERCO singlet.



ERCO turning transadapter

ERCO transadapters contain the control gear of the luminaire. For phase dimmable luminaires, the adapter also includes the controller for On-board Dim. Due to its dimensions, luminaires with this adapter are not suitable for mounting in the ERCO singlet.

Adapter for pendant luminaires



2-circuit turning adapter kit for pendant luminaires

2-circuit adapters establish the electrical and mechanical connection to the luminaire. The adapter is suitable for mounting in the ERCO singlet.

Electrical load: max. 120V / 6A
Mechanical load: max. 7.25lbs (3.3kg)

Static load

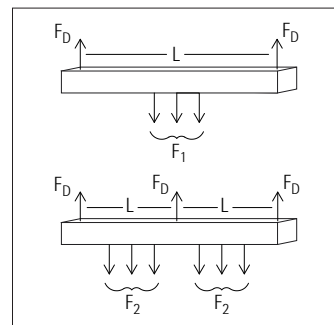
When planning a track system, determination of the static load is important. It has a direct influence on the fixing points and on the subsequent equipping with luminaires. To avoid re-working, you should also take into account any planned future changes.



The maximum permissible weight load of the track results from the maximum permissible deflection of the profiles and the maximum permissible load of the suspensions. The load distribution is composed of the system's own weight and evenly distributed individual loads (point loads). You can determine the maximum permissible weights using the adjacent illustration and the associated table.

Here are the necessary parameters:

- L (ft / mm) Length
- f_e (ft / mm) Deflection due to weight of profile
- F_D (lbs / kg) Max. load of one suspension
- F_e (lbs / kg) Weight of profile
- F_1 (lbs / kg) Max. permissible load with two-point suspension and permissible deflection (L/250) of 4mm per meter length
- F_2 (lbs / kg) Max. permissible load with multi-point suspension and permissible deflection (L/250) of 4mm per meter length



ERCO track

L (ft)	4	8	12
L (mm)	1219	2438	3657
F_e (lbs)	2.95	5.91	8.88
F_e (kg)	1.34	2.68	4.03
f_e (inch)	0.04	0.22	0.69
f_e (mm)	1.09	5.50	17.40

FD = 44.06lbs (20.00kg)

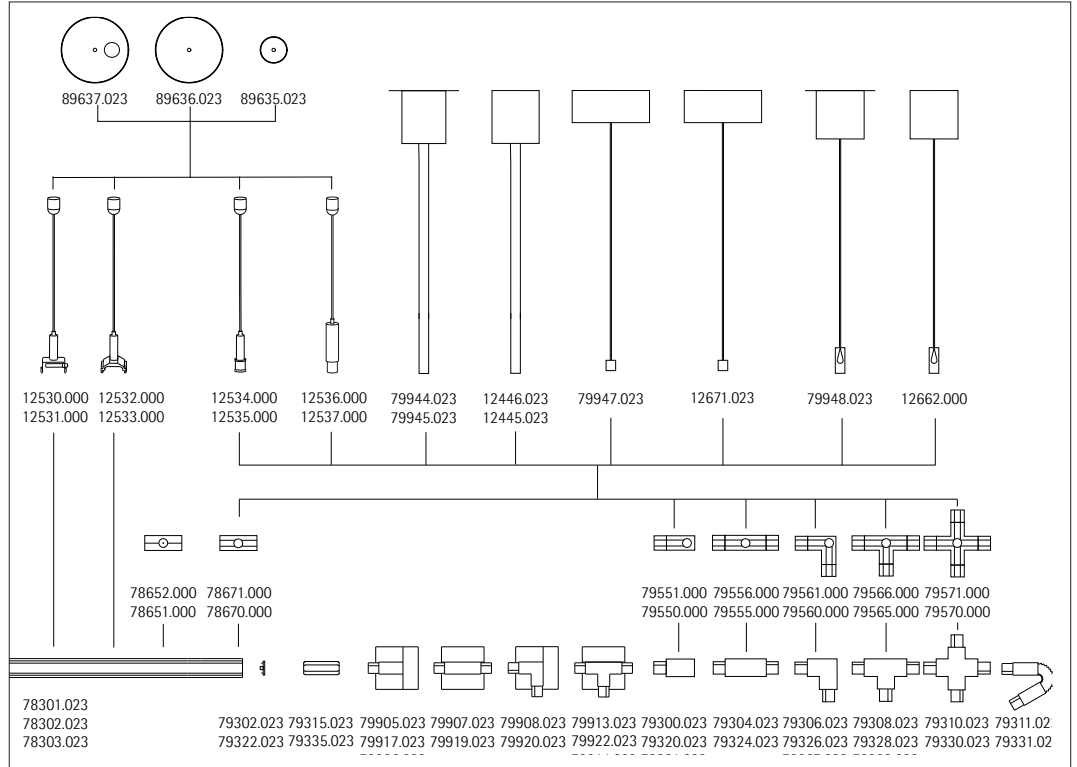
F_1 (lbs)	24.25	6.61	—
F_1 (kg)	11.00	3.00	—
F_2 (lbs)	24.25	6.61	—
F_2 (kg)	11.00	3.00	—

Notes

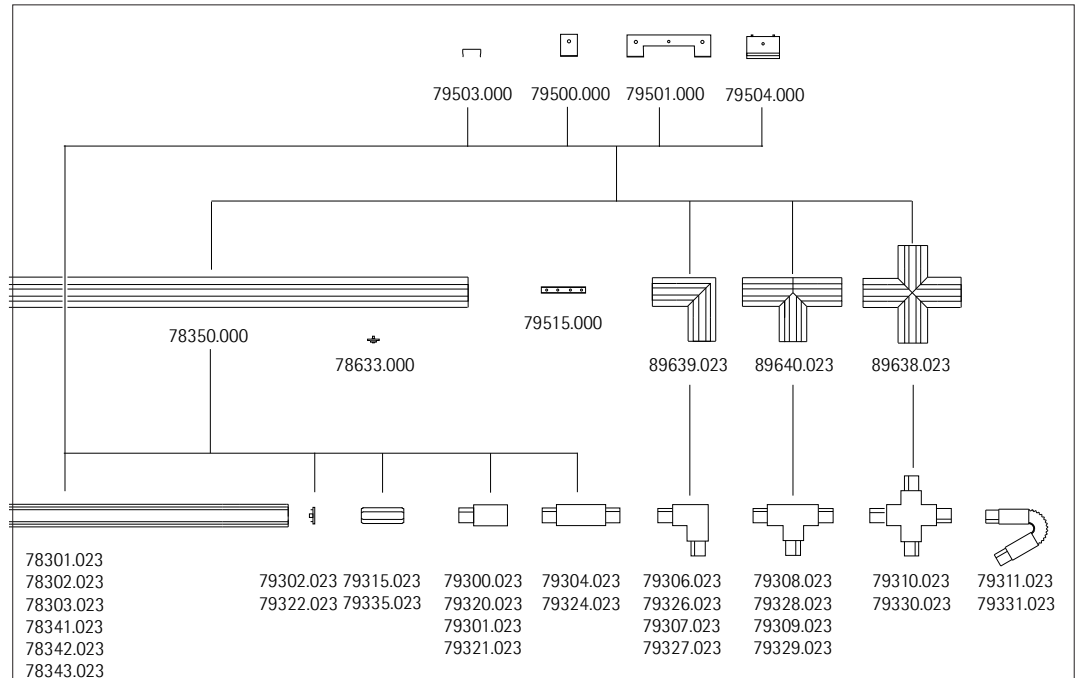
The values given apply to horizontal mounting below the ceiling. All luminaires approved for the ERCO track system can be used.

For wall mounting, which is possible in principle, only luminaires with a limited weight may be used. Observe the installation instructions of the luminaire.

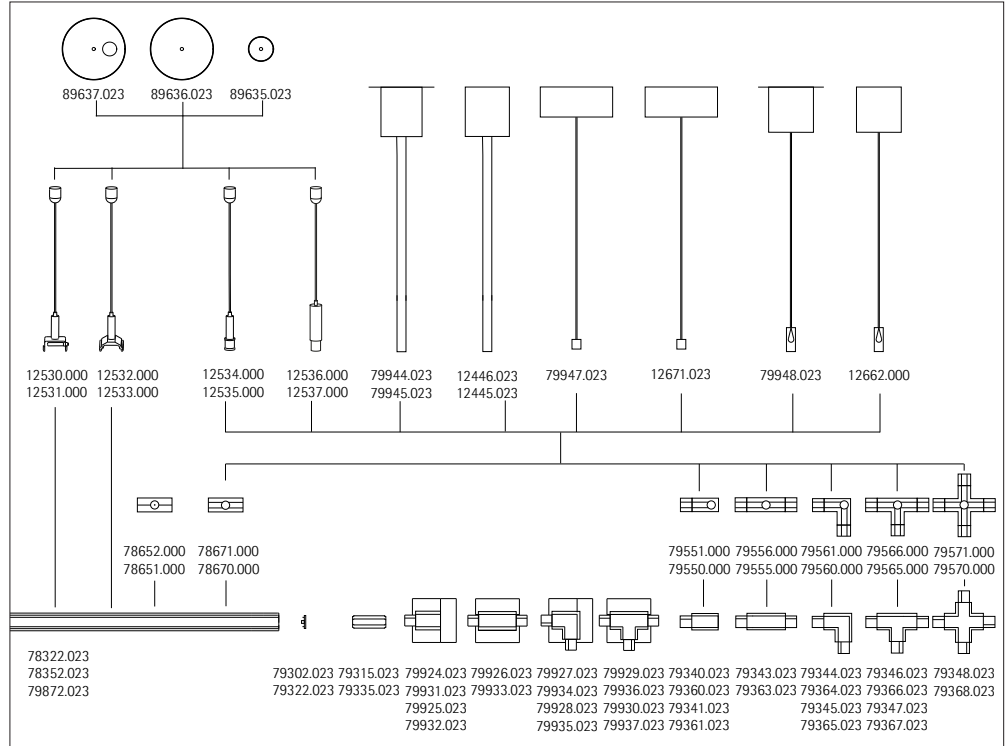
Check the possible combinations of the track accessories for surface mounting and pendant suspension in the adjacent diagram.



Check the possible combinations of the track accessories for recessed mounting in the adjacent diagram. ERCO wire rope suspensions are also suitable for recessed mounting.



Check the possible combinations of the track accessories for pendant suspension in the adjacent diagram.



Check the possible combinations of the track accessories for recessed mounting in the adjacent diagram. ERCO wire rope suspensions are also suitable for recessed mounting.

