

LPCFJS - February 13, 2018

Item # LPCFJS was discontinued on February 13, 2018. For informational purposes, this is a copy of the website content at that time and is valid only for the stated product.

LASER SAFETY CURTAIN SYSTEM, FLOOR MOUNTED

► Construct Custom Laser Curtain Barriers Using Standard Parts

► Laser Curtains Certified to EN 12254:2010(E)

► Modular Components Allow for Customization



OVERVIEW

Features

- Flame Retardant Laser Curtains with Magnetic Connectors for Simple Light-Tight Seals
- Curtain Tracks and Track Connectors Create a Path for Laser Curtains to Follow
- Floor Mounting Brackets and Columns for Mounting the Curtain System in the Lab
- Curtain End Stops Provide a Hard Stop Along Tracks

Thorlabs' Laser Safety Curtain System provides a modular assembly that imparts the ability to fully customize a system to fit most lab spaces using a standard system of components. This system features laser curtain panels, curtain tracks, track connectors, and floor mounting adapters that are each sold individually. The flexibility inherited from using standard components makes it easy to augment an existing Thorlabs laser curtain system or replace specific parts in it.

Laser Curtain System Component Selection Process



Common Configurations



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The modular design of Thorlabs' laser safety curtain allows them to be easily configured to fit most labs. To see more



[Click to Enlarge](#)

configurations, please see the *Common Configurations* tab.

The laser curtain system can be used at an entrance way, as a barrier around an optical table or workstation, to cover windows, or as a barrier for any other laser-controlled area. For example system configurations with part lists, please see the *Common Configurations* tab above. Please note that these laser curtains are not intended to be used as long term beam blocks and are rated for short term exposures. The curtain materials have been tested individually by a third party using EN specifications; see the *Certifications* tab above for more details. For terminating a pulsed or CW laser, see our selection of beam blocks and traps.

To begin constructing a laser curtain system for your lab, simply follow the steps outlined above and to the right. Curtain tracks are available with seven length options to choose from, including a curved, 90° track. Various track connectors are provided to connect two or three tracks together. Curtain panels are available in two lengths (2.13 m and 2.44 m) and three widths (1.45 m, 2.14 m, and 2.90 m). Please contact Tech Support with any questions about how to configure a system for your lab. All components available on this page can be integrated with our line of ceiling mounted laser curtains and our laser safety curtain kits.

Due to different building codes, material types, and room designs, hardware to mount this system to floors is not included with any of our laser curtain system products. Please choose screws and fittings which are suitable for use in your floor and have enough holding power. For reference, chosen hardware should be able to withstand shear forces of approximately 30 N (6.7 lbf) and tensile forces of approximately 440 N (98.9 lbf). If you are uncertain, please contact a local specialized retailer.

Laser Safety Curtain Kits are also available that include all components needed to mount laser curtains to a Nexus® Optical Table Workstation Frame, which has an overhead shelving unit installed, or directly to our Free-Standing Shelves. Kits that fully enclose a 1 m x 2 m, 1.2 m x 2 m, or 1.2 m x 2.5 m optical table are available. Each kit provides approximately 2.2 m (7.2') of overhead clearance when mounted, has continuous tracking for uninterrupted movement of the curtains, and includes enough laser safety curtains to fully enclose the optical table.

Laser Safety Accessories

Modular Laser Curtains Ceiling Mounted	Modular Laser Curtains Floor Mounted	Laser Curtain Kits	Laser Glasses	Laser Signs	Beam Blocks/Traps	Beam Shutters	Aluminum Protective Screens	Blackout Materials
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CERTIFICATIONS

DISCLAIMER

The Laser Curtain materials have been tested individually by a third party using EN specifications. Due to manufacturing variances, mechanical wear, and laser damage, Thorlabs assumes no responsibility for laser curtain failure. Please consult your laser safety specialist before purchasing to ensure that these barriers are suitable for your application. To minimize risk, inspect each curtain before each use and ensure that it is in excellent condition.

EN Certification

Certification Requirements	Test Parameters	Damage Threshold	Maximum Spectral Transmittance Ratio	Certification Level ^a
EN 12254: 2010 (E), 180 - 315 nm Range	266 nm (CW)	1 x 10 ⁷ W/m ²	1 x 10 ⁻¹⁰	D AB10
EN 12254: 2010 (E), 180 - 315 nm Range	266 nm, 45 ms Pulses (FWHM), 10 Hz	3 x 10 ⁵ J/m ²	1 x 10 ⁻⁵	I AB5
EN 12254: 2010 (E), 180 - 315 nm Range	266 nm, 5 ns Pulses (FWHM), 10 Hz	3 x 10 ⁵ J/m ²	1 x 10 ⁻⁴	R AB4
EN 12254: 2010 (E), 180 - 315 nm Range	266 nm, 500 ps Pulses (FWHM), 20 Hz	3 x 10 ¹² J/m ²	1 x 10 ⁻²	M AB2
EN 12254: 2010 (E), 315 - 1050 nm Range	532 nm (CW)	1 x 10 ⁷ W/m ²	1 x 10 ⁻⁷	D AB7
EN 12254: 2010 (E), 315 - 1400 nm Range	1064 nm, 2 ms Pulses (Square), 20 Hz	5 x 10 ⁴ J/m ²	1 x 10 ⁻⁷	R AB7
EN 12254: 2010 (E), 315 - 1400 nm Range	1064 nm, 3 ms Pulses (Square), 10 Hz	5 x 10 ⁵ J/m ²	1 x 10 ⁻⁸	I AB8
EN 12254: 2010 (E), 315 - 1400 nm Range	1064 nm, 500 ps Pulses (Square), 20 Hz	1.5 x 10 ⁴ J/m ²	1 x 10 ⁻⁸	M AB8
EN 12254: 2010 (E), 1050 - 1400 nm Range	1070 nm (CW)	2.5 x 10 ⁶ W/m ²	1 x 10 ⁻⁵	D AB5
EN 12254: 2010 (E), 1400 - 10 600 nm Range	10.6 μm (CW)	1 x 10 ⁶ W/m ²	1 x 10 ⁻⁴	D AB3
EN 12254: 2010 (E), 1400 - 10 600 nm Range	10.6 μm, 3 ms Pulses (Square), 10 Hz	1 x 10 ⁶ J/m ²	1 x 10 ⁻⁴	I AB4
EN 12254: 2010 (E), 1400 - 10 600 nm Range	10.6 μm, 100 ns Pulses (Square), 1 Hz	1 x 10 ⁴ J/m ²	1 x 10 ⁻⁴	R AB2

- These certification levels are reproduced from EN 12254 and are included on the back of every curtain.

Other EN Certifications^a

Certification Type	Test Wavelength	Pulsewidth (FWHM)	Comments
Mechanical Strength	N/A	N/A	UV Exposed Protected Fabric. All samples meet requirement.
Resistance to Ignition	N/A	N/A	Flame does not reach the test mark with the burner in position, and self-extinguishes after removal of the burner. Material does not continue to glow for more than one second after removal of the burner.
Spectral Transmittance	200 nm - 50,000 nm	N/A	Samples do not exhibit transmission windows from 200 nm to 50 000 nm.
Stability to Temperature	Various	Various	No degradation was observed in any AB level for any sample.
Stability to UV Radiation	All	10 ns - 20 ns	Samples feel slightly stiff to the touch but does not exhibit any cracking, peeling, or degradation.

- These certification levels are reproduced from EN 12254: 2010(E).

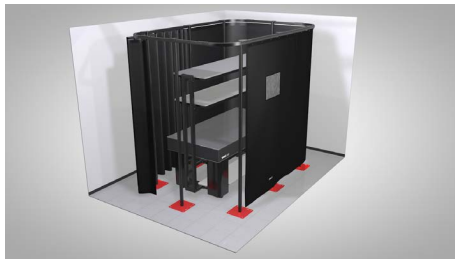
COMMON CONFIGURATIONS

The modular design of Thorlabs' laser safety curtain system allows it to be easily customized to fit into most labs. Example configurations are shown below with links that provide information about which item #'s are used. Each example assumes that a 2.44 m (8') tall laser curtain is used, and that bases are bolted to the floor. It is not recommended to use this system before bolting the base plates to the floor. Depending on the room design and desired setup, different or additional mounting hardware may be required; please contact Tech Support if assistance is needed.

When constructing a curtain system, we recommend ordering enough curtains so that the curtains' combined width is roughly 7-10% longer than the overall length of the curtain tracks. This allows the curtains to hang with fullness along the length of the track, ensuring that the lab area will be properly enclosed. The curtains have a magnetic strip sewn along each edge allowing them to be attached to one another with a light-tight seal. When floor mounting a curtain system, we recommend a floor mounted support every 1.2 m.

Due to different building codes, material types, and room designs, hardware to mount this system to the floor is not included with any of our laser curtain system products. If you are uncertain, please contact a local specialized retailer.

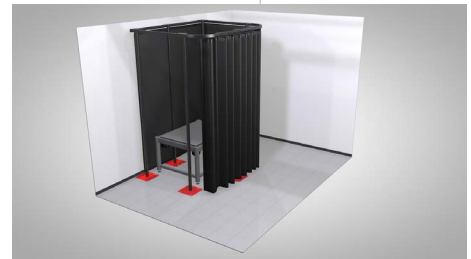
Example 1: Central Area in Lab



Click to Enlarge
[Mechanical Diagram](#) | [\[APPLIST\]](#)

The above example configuration is provided to show how our modular laser curtain system can be used to isolate a central area in a lab. This specific example is designed to fit around a 1.2 m x 2.5 m optical table. Click the "View Product List" link above to view all of the items used in this assembly.

Example 2: Surrounding a ScienceDesk™



Click to Enlarge
[Mechanical Diagram](#) | [\[APPLIST\]](#)

The above example configuration is provided to show how our modular laser curtain system can be used to surround a ScienceDesk™ workstation. Click the "View Product List" link above to view all of the items used in this assembly.

Example 3: Dividing a Lab



[Click to Enlarge](#)

[Mechanical Diagram](#) | [\[APPLIST\]](#)

The above example configuration is provided to show how our modular laser curtain system can be used to divide sections of a lab. This specific example shields an entryway from a work area. Click the "View Product List" link above to view all of the items used in this assembly.

Example 4: Corner of Lab



[Click to Enlarge](#)

[Mechanical Diagram](#) | [\[APPLIST\]](#)

The above example configuration is provided to show how our modular laser curtain system can be used in the corner of a lab. Click the "View Product List" link above to view all of the items used in this assembly.

LASER SAFETY

Laser Safety and Classification

Safe practices and proper usage of safety equipment should be taken into consideration when operating lasers. The eye is susceptible to injury, even from very low levels of laser light. Thorlabs offers a range of laser safety accessories that can be used to reduce the risk of accidents or injuries. Laser emission in the visible and near infrared spectral ranges has the greatest potential for retinal injury, as the cornea and lens are transparent to those wavelengths, and the lens can focus the laser energy onto the retina.









Safe Practices and Light Safety Accessories

- Thorlabs recommends the use of safety eyewear whenever working with laser beams with non-negligible powers (i.e., > Class 1) since metallic tools such as screwdrivers can accidentally redirect a beam.
- Laser goggles designed for specific wavelengths should be clearly available near laser setups to protect the wearer from unintentional laser reflections.
- Goggles are marked with the wavelength range over which protection is afforded and the minimum optical density within that range.
- Laser Safety Curtains and Blackout Materials can prevent direct or reflected light from leaving the experimental setup area.
- Thorlabs' Enclosure Systems can be used to contain optical setups to isolate or minimize laser hazards.
- A fiber-pigtailed laser should always be turned off before connecting it to or disconnecting it from another fiber, especially when the laser is at power levels above 10 mW.
- All beams should be terminated at the edge of the table, and laboratory doors should be closed whenever a laser is in use.
- Do not place laser beams at eye level.
- Carry out experiments on an optical table such that all laser beams travel horizontally.
- Remove unnecessary reflective items such as reflective jewelry (e.g., rings, watches, etc.) while working near the beam path.
- Be aware that lenses and other optical devices may reflect a portion of the incident beam from the front or rear surface.
- Operate a laser at the minimum power necessary for any operation.
- If possible, reduce the output power of a laser during alignment procedures.
- Use beam shutters and filters to reduce the beam power.
- Post appropriate warning signs or labels near laser setups or rooms.
- Use a laser sign with a lightbox if operating Class 3R or 4 lasers (i.e., lasers requiring the use of a safety interlock).
- Do not use Laser Viewing Cards in place of a proper Beam Trap.



Laser Classification

Lasers are categorized into different classes according to their ability to cause eye and other damage. The International Electrotechnical Commission (IEC) is a global organization that prepares and publishes international standards for all electrical, electronic, and related technologies. The IEC document 60825-1 outlines the safety of laser products. A description of each class of laser is given below:

Class	Description	Warning Label
1	This class of laser is safe under all conditions of normal use, including use with optical instruments for intrabeam viewing. Lasers in this class do not emit radiation at levels that may cause injury during normal operation, and therefore the maximum permissible exposure (MPE) cannot be exceeded. Class 1 lasers can also include enclosed, high-power lasers where exposure to the radiation is not possible without opening or shutting down the laser.	
1M	Class 1M lasers are safe except when used in conjunction with optical components such as telescopes and microscopes. Lasers belonging to this class emit large-diameter or divergent beams, and the MPE cannot normally be exceeded unless focusing or imaging optics are used to narrow the beam. However, if the beam is refocused, the hazard may be increased and the class may be changed accordingly.	
2	Class 2 lasers, which are limited to 1 mW of visible continuous-wave radiation, are safe because the blink reflex will limit the exposure in the eye to 0.25 seconds. This category only applies to visible radiation (400 - 700 nm).	
2M	Because of the blink reflex, this class of laser is classified as safe as long as the beam is not viewed through optical instruments. This laser class also applies to larger-diameter or diverging laser beams.	
3R	Lasers in this class are considered safe as long as they are handled with restricted beam viewing. The MPE can be exceeded with this class of laser, however, this presents a low risk level to injury. Visible, continuous-wave lasers are limited to 5 mW of output power in this class.	
3B	Class 3B lasers are hazardous to the eye if exposed directly. However, diffuse reflections are not harmful. Safe handling of devices in this class includes wearing protective eyewear where direct viewing of the laser beam may occur. In addition, laser safety signs lightboxes should be used with lasers that require a safety interlock so that the laser cannot be used without the safety light turning on. Class-3B lasers must be equipped with a key switch and a safety interlock.	
4	This class of laser may cause damage to the skin, and also to the eye, even from the viewing of diffuse reflections. These hazards may also apply to indirect or non-specular reflections of the beam, even from apparently matte surfaces. Great care must be taken when handling these lasers. They also represent a fire risk, because they may ignite combustible material. Class 4 lasers must be equipped with a key switch and a safety interlock.	
All class 2 lasers (and higher) must display, in addition to the corresponding sign above, this triangular warning sign		

Laser Curtain Tracks

These aluminum Laser Curtain Tracks provide a path for our laser safety curtain panels to follow; see the table below for all of the options available. The top channel is designed for track connectors and wall/ceiling/floor mounting adapters while the bottom channel accepts wheel runners, which hold our laser safety curtains. For proper operation of the tracks, the bottom channel should not be obstructed. The side channels are sized to mount our LPC05 curtain end stops.

Tracks can be attached in series using track connectors, available below. Each rail has two dowel pin holes by the bottom channel to ensure proper alignment (dowel pins are included with the track connectors).



Click to Enlarge
LPCC90 Curved
Track



Click to Enlarge
Each track contains a top
channel for mounting
adapters, two side channels
for end stops, and one
bottom channel for wheel
runners.

Track Options							
Item #	LPCL06	LPCL08	LPCL10	LPCL12	LPCL14	LPCL16	LPCC90
Type	Straight						Curved, 90°
Track Length	0.6 m	0.8 m	1.0 m	1.2 m	1.4 m	1.6 m	0.64 m ^a

- a. Arc Length. For more information, please see product documentation.

Part Number	Description	Price	Availability
LPCL06	0.6 m Long Track for Laser Curtain Panels	\$48.96	Today
LPCL08	0.8 m Long Track for Laser Curtain Panels	\$53.55	Today
LPCL10	1.0 m Long Track for Laser Curtain Panels	\$61.97	Today
LPCL12	1.2 m Long Track for Laser Curtain Panels	\$66.56	Lead Time
LPCL14	1.4 m Long Track for Laser Curtain Panels	\$73.19	Today
LPCL16	1.6 m Long Track for Laser Curtain Panels	\$79.56	Today
LPCC90	90° Curved Track for Laser Curtain Panels	\$93.84	Today

Laser Safety Curtain Panels

- ▶ Certified to EN 12254:2010(E)*
- ▶ Flame Retardant
- ▶ Magnetic Strips Connect Curtains for Light-Tight Seal
- ▶ Document Pocket and Protection Level Information Provided on Curtain
- ▶ Wheel Runners Included (Replacements Available Below)



Click to Enlarge
Wheel runner shown
being added to a
curtain track. Each
curtain includes one
wheel runner for each
eyelet.

Thorlabs' Laser Safety Curtains are certified to EN 12254:2010(E); certification levels can be found in the table to the right. Each curtain is made using a rubber compound fabric and includes a 380 mm x 280 mm document pocket on the front of the curtain. The back of the curtain includes the item #, safety compliance information, manufacturing date, and protection level information. Curtains are provided in two lengths (2.13 m and 2.44 m) and three widths (1.45 m, 2.14 m, and 2.90 m). They can be connected to each other using magnetic strips that are sewn along the sides of each curtain. These strips run along the length of the curtain and provide a light-tight seal.

The curtains include one wheel runner for each eyelet. To mount a curtain onto a track, available above, simply insert the wheel runners into the track's bottom channel, as shown in the image to the right. When choosing a laser curtain, we recommend ordering enough so that the combined width is roughly 7-10% longer than the

Curtain Material Certifications	
Wavelength	Certification ^a
180 nm - 315 nm	D AB10 I AB5 R AB4 M AB2
>315 nm to 1050 nm	D AB7
>315 nm to 1400 nm	IM AB8 R AB7
>1050 nm to 1400 nm	D AB5
>1400 nm to 10 600 nm	D AB3 R AB2

- a. These certification levels are reproduced from EN 12254 and are included on the back of every curtain. See the *Certifications* tab above for

overall length of the curtain tracks. This allows the curtains to be draped along the length of the track, ensuring that the lab area will be properly enclosed.

complete details.

***DISCLAIMER**

The curtain materials have been tested individually by a third party using EN specifications; see the *Certifications* tab for details. Due to manufacturing variances, mechanical wear, and laser damage, Thorlabs assumes no responsibility for laser curtain failure. Please consult your local laser safety specialist before purchasing to ensure that the curtain is suitable for your application. To minimize risk, inspect the curtain before each use and ensure that it is in excellent condition.

Part Number	Description	Price	Availability
LPCP57	Laser Curtain Panel, 1.45 m x 2.13 m (W x L)	\$984.30	Today
LPCP77	Laser Curtain Panel, 2.14 m x 2.13 m (W x L)	\$1,659.54	Today
LPCP107	Laser Curtain Panel, 2.90 m x 2.13 m (W x L)	\$1,812.54	Lead Time
LPCP58	Laser Curtain Panel, 1.45 m x 2.44 m (W x L)	\$1,060.80	Lead Time
LPCP78	Laser Curtain Panel, 2.14 m x 2.44 m (W x L)	\$1,806.42	Lead Time
LPCP108	Laser Curtain Panel, 2.90 m x 2.44 m (W x L)	\$1,960.44	Lead Time

Track Connectors

- ▶ Attach Two or More Tracks to Form Path for Laser Safety Curtains
- ▶ Versions With and Without Wall or Floor Mounting Options
- ▶ Choose from a T-Joint, Corner Joint, or Linear Rail Joiners
- ▶ Hardware Used to Fix Connectors to Mounting Columns Included*













Click to Enlarge
Spring pins are provided when tracks need to be connected end-to-end to ensure proper alignment.

Track connectors are used to attach two or three laser curtain tracks to one another. Versions that are designed to be placed into a mounting column are available, as are standard track connectors. They are attached to the top channel of the track so that the wheel grooves are not obstructed; for specific mounting instructions, see the table below. When floor mounting a curtain system, we recommend a floor mounted support every 1.2 m.

*Due to different building codes, material types, and room designs, hardware to mount this system to floors and walls is not included with any of our laser curtain system products. Please choose screws and fittings which are suitable for use in your floor or wall and have enough holding power. If you are uncertain, please contact a local specialized retailer.

Click on the photos below to see how each connector is used to connect curtain tracks.

Track Connector Options					
Product Photo ^a	 Click for Details	 Click for Details	 Click for Details	 Click for Details	 Click for Details
Item #	LPC01	LPC15	LPCFJJ	LPCFJ90	LPCFJT
Track Connection	Two Way			90° (Corner) Joint	Three-Way Joint (T-Joint)
Floor/Wall Mounting Compatibility	N/A	Two LPC03 Brackets for Use with Direct Wall Attachment	Post for Use with LPCFC7 or LPCFC8 Floor Mounting Column		
Mounting Instructions					
Included Mounting Hardware	M6 Cap Screw (x4) Spring Pins (x2)	M6 Cap Screw (x4) M8 Cap Screw (x2) M8 Washer (x2) Spring Pins (x2)	M6 Cap Screw (x4) M8 Bolt (x2) M8 Washer (x2) Spring Pin (x2) Joint Plate (x1)	M6 Cap Screw (x4) M8 Bolt (x2) M8 Washer (x2) Half Joint Plate (x2)	M6 Cap Screw (x6) M8 Bolt (x2) M8 Washer (x2) Spring Pin (x2) Half Joint Plate (x1) Joint Plate (x1)

- a. Please see each item's respective manual for detailed mounting instructions. M6 Cap screws require a 5/32" (4 mm) hex key while M8 cap screws require a 6 mm hex key. Hex keys are not included.

Part Number	Description	Price	Availability
LPC01	Track Connector Kit	\$19.28	Today
LPC15	Track Connector Kit with Two LPC03 Wall Mounting brackets	\$40.29	Today
LPCFJJ	Track Connector Kit with Post for Floor Mounting	\$102.00	Today
LPCFJ90	90° (Corner) Track Connector Kit with Post for Floor Mounting	\$117.00	Today
LPCFJT	3-Way (T-Joint) Track Connector with Post for Floor Mounting	\$123.00	Today

Dedicated Track Support

- ▶ Support a Single Laser Curtain Track
- ▶ Attaches Directly to a Mounting Column Using Included M8 Cap Screws
- ▶ Attaches to Top Channel of Curtain Track for Support Using Included M6 Cap Screws

Included Hardware
M6 Cap Screw (x2)
M8 Cap Screw (x2)
M8 Washer (x2)
Half Joint Plate



Click to Enlarge
LPCFJS Support Shown Attached to a Curtain Track

The LPCFJS Rail Support is used to provide additional support for the tracks. The LPCFJS attaches to a mounting column using a 6 mm hex key (not included) and included M8 screws. It then attaches to a curtain track using a 4 mm hex key (not included) and included M6 screws.

When floor mounting a curtain system, we recommend the use of a floor mounted support every 1.2 m.

Part Number	Description	Price	Availability
LPCFJS	Curtain Track Support with Post for Floor Mounting	\$97.00	Today

Mounting Elements

- ▶ Mounting Base to Affix Curtain System to a Floor
 - ▶ Painted Red to Increase Visibility When Working
- ▶ Mounting Columns Support Curtain Tracks, Connectors, and Supports
 - ▶ LPCFC7: Compatible with 2.13 m Long Laser Curtains
 - ▶ LPCFC8: Compatible with 2.44 m Long Laser Curtains
- ▶ Columns Attach To Bases Using Included M8 Cap Screws
- ▶ Hardware Used to Fix Mounting Base to Floor Not Included

Included Hardware	
Base	Columns
M8 Cap Screw (x2)	N/A
M8 Washer (x2)	

The LPCFB12 Mounting Base is used to mount the modular laser safety curtain system to the floor. Each base accepts an LPCFC7 or LPCFC8 mounting column, which can be used with a 2.13 m or 2.44 m laser curtain, respectively. They can then accept a track support or track connector to start forming the frame of your laser system. The mounting column attaches to the mounting base using a 6 mm hex key (not included) and included M8 cap screws and washers.

A support column and base is recommended for every 1.2 m of track.

*Due to different building codes, material types, and room designs, hardware to mount this system to floors is not included with any of our laser curtain system products. Please choose screws and fittings which are suitable for use in your floor and have enough holding power. For reference, chosen hardware should be able to withstand shear forces of approximately 30 N (6.7 lbf) and tensile forces of approximately 440 N (98.9 lbf). If you are uncertain, please contact a local specialized retailer. It is not recommended to use this system before bolting the base plates to the floor.

Part Number	Description	Price	Availability
LPCFB12	Base for Floor Mounted Laser Curtains	\$190.00	Today
LPCFC7	Mounting Column for Floor Mounting 2.13 m (7') Laser Curtains	\$70.00	Today
LPCFC8	Mounting Column for Floor Mounting 2.44 m (8') Laser Curtains	\$75.00	Lead Time

Wall Mounting Brackets

Included Hardware	
M8 Cap Screw (x1)	▶ Mount Laser Curtain Tracks Directly to a Wall for Support <ul style="list-style-type: none"> ▶ LPC03: Track Mounted Flush with Wall ▶ LPC14: Track Mounted 138.0 mm from Wall
M8 T-Nut (x1)	▶ Attaches to Curtain Track Using M8 Cap Screw and T-Nut (Included)
M8 Washer (x1)	▶ Hardware Used to Fix Brackets to a Wall is Not Included*



Click for Details
The LPC03 is used to hang a curtain track so that it can be flush with a support wall.

Click for Details
The LPC14 is used to hang a curtain track 138.0 mm from a support wall.

The LPC03 and LPC14 Mounting Brackets are used to attach a laser curtain track flush with or 138.0 mm from a wall, respectively. Each bracket attaches to the top-located channel of the curtain tracks using a 6 mm hex key (not included) and included M8 cap screw and T-nut, allowing the track to be positioned before it is secured in place. See the images to the right for details.

The LPC03 bracket includes three Ø6.8 mm x 10.0 mm through slots and the LPC14 includes two Ø9.0 mm through holes so that they can be mounted to a wall*.

*Due to different building codes, material types, and room designs, hardware to mount these brackets to a wall is not included. Please be aware of the overall weight of the mounted system and choose screws and fittings that are suitable and have enough holding strength for use in your wall or ceiling. If you are uncertain, please contact a specialized retailer.

Part Number	Description	Price	Availability
LPC03	Wall Mounting Bracket for Laser Curtain Tracks, Flush with Wall	\$15.50	Today
LPC14	Wall Mounting Bracket for Laser Curtain Track, 138 mm From Wall	\$21.62	Today

Curtain End Stops

Included Hardware	
M4 Cap Screw (x2)	▶ Provides a Hard Stop for Laser Safety Curtain Panels
M4 Drop-In T-Nut (x2)	▶ Attaches to the Side Channels of the Curtain Track Using the Provided M4 Cap Screw and T-Nut
M4 Washer (x2)	▶ Can be Placed at Any Location Along the Curtain Track



Click to Enlarge
The LPC05 shown attached to the top of a track with an LPC02 to create a horizontal restraint that prevents swaying of the system.



Click to Enlarge
End Stop Shown Attached to the Side of a Curtain Track to Stop the Movement of the Wheel Runners

The LPC05 is used to provide a hard stop for a laser curtain mounted to a track. As shown in the image to the right, it is designed to attach to the side channel of the curtain track using the provided drop-in nut and M4 cap screw. The drop-in nut can be placed into the channel from anywhere on the track; it does not need to be slid in on the end of the track.

When the curtain's wheel runner is in place, the end stop can be positioned with the bottom slot around the hook of the wheel runner. The end stop and held wheel runner can then be adjusted along the length of the curtain track by loosening the M4 cap screw that secures the end stop in place.

The LPC05 can also be attached to the top channel of the laser curtain track to provide additional wall support for the laser curtain system. See the image to the right for details and the manual for specific, step-by-step mounting instructions.

Part Number	Description	Price	Availability
LPC05	Laser Curtain End Stops (Pack of 2)	\$19.28	Today

Replacement Wheel Runners

The LPC07 contains a pack of 10 replacement wheel runners that are used to attach the laser safety curtains to a curtain track. First, insert the wheels of the LPC07 into the bottom channel of the curtain track. Then slide the hook of the wheel runner into the eyelet of the laser curtain.

Please note that Thorlabs' laser safety curtains come with one wheel runner for each eyelet in the panel.



[Click to Enlarge](#)
Wheel runners shown being added to a curtain track. Each laser curtain includes one wheel runner for each eyelet.

Part Number	Description	Price	Availability
LPC07	Replacement Wheel Runners for Laser Curtain System (Pack of 10)	\$68.85	Today