Laser-Gard® Barrier System



Revolutionary, Modular System for Optical Tables

SAFEGUARDING EXPERIMENTAL CONDITIONS

Laser-Gard[®] Barrier System

This innovative, customizable system for an optical table provides protection from laser hazards within an experimental set-up using lasers.

Customized Safety

The patent-pending Laser-Gard Barrier System offers a unique, customizable way to securely enclose a laser set-up on an optical table, thereby enhancing experimental conditions while safeguarding personnel from exposure to laser radiation. The Laser-Gard Barrier System provides a controlled environment that optimizes experiment conditions by considerably reducing interference from air turbulence, ambient light and dust. At the same time, the laser protective panels ensure a safe working environment by reducing the risk of direct exposure to laser radiation.

Ease of Use

The Laser-Gard Barrier System is a flexible, modular system that is easy to install and adjust to the exact size of your optical table. The modular design effectively combines ease of access with added safety features.

Each panel is equipped with a safety locking mechanism that prevents unintended access and consequent exposure to laser radiation. This safety locking mechanism incorporates a visual indicator (lock indicator label) that clearly identifies whether or not the panel is properly closed. Access to the optical table remains quick and easy by simply flipping down a side panel, but it must be a conscious action.





Features & Benefits

- Laser-resistant enclosure designed especially for optical tables Significantly reduces direct and indirect laser hazard exposure
- Full, enclosed design

Controls experimental environment and reduces interference from air turbulence, ambient light and dust

- Cable access around the entire perimeter of the optical table Saves time and effort if you need to adjust the experiment.
 Cable access points can be changed without altering the barrier
- Flexible, modular design

Adjusts to the exact size of optical table and is easy to install, remove and transport using basic tools

- Locking mechanism for each panel
 Prevents accidental exposure while retaining
 quick and easy intended access
- Unique adjustable panel
 Provides a good fit for variety of table sizes and configurations.
- Visual locking indicator Ensures safe and proper panel closure
- Perimeter attachment system
 Saves space, eliminates the need to use table holes and does not interfere with experiment
- Lightweight, replaceable panels
 Provides cost-effective solution versus traditional curtains



Panels are adjustable to fit almost any optical table

Guaranteed Access

The Laser-Gard Barrier System guarantees cable access around the entire perimeter of the optical table. The system fixes securely around the outer edge of the optical table, without using any of the holes in the table or taking up additional space. The entire width and length of the optical table remains available for the experiment. These ingenious design features make it simple to equip a new or an existing experiment set-up with the Laser-Gard Barrier System.

The Laser-Gard Barrier System also offers several advantages over standard curtain solutions. The Laser-Gard Barrier System allows viewing of the experiments and requires no cumbersome structure to hang the barrier, is simple to move, and if a panel is exposed to excess laser radiation, that single panel can easily be replaced at significantly lower cost than replacing a whole curtain.



The Laser-Gard Barrier System provides a safe, simple, easy-to-use laser safety solution that not only enhances experiments but also improves efficiency and ensures a safer, more secure workplace environment.

Laser-Gard® Barrier System

SPECIFICATIONS

Laser resistance:

• ANSI Z136.7:

- Continuous Wave Lasers: Threshold limit exceeds 30 kW/cm2 for beam sizes of ≤0.915mm for exposure time of ≤100 seconds at test wavelengths of 1064nm, 10600nm

- Pulsed Lasers: Threshold limit exceeds 220J/cm2 for beam sizes of ≤0.925mm for exposure time of ≤100 seconds at test wavelengths of 1064nm, pulsewidth 20ns

- Picosecond Lasers: Threshold limit exceeds 100J/cm2 for beam sizes of ≤0.513mm for exposure time of ≤100 seconds at test wavelengths of 1064nm, pulsewidth 600ps

• EN 12254:

315-1400 D AB6 + I AB8 + RM AB9 1400-11000 D AB5

Certifications:

- Meets European safety standard EN 12254 (Screens for laser working places)
- Meets ANSI Z136.1

Material:

• Aluminum with special coating to disperse incident light

Dimensions of panel:

• Each panel measures:

24" (61cm) wide x 14" (35.6cm) high

• Height above optical table when mounted equals 12" (30,5cm)

Packaging:

Comes in two boxes:

Box 1: 25" x 11" x 18" (Panels) (63,5 x 27,9 x 45,7 cm) Box 2: 17" x 14" x 6.5" (Corners, uprights, hardware) (43,2 x 35,6 x 16,5 cm)

Packaging Weight (approximate):

- 4' x 6' Table Kit: 36 lbs (2 boxes 18 lbs each) (16,36kg (2 boxes - 8,18kg each))
- 4' x 8' Table Kit: 40 lbs (2 boxes 20 lbs each) (18,18kg (2 boxes - 9,09kg each))
- 4' x 10' Table Kit: 50 lbs (2 boxes 25 lbs each) (22,73kg (2 boxes – 11,36kg each))



ORDERING INFORMATION

| Item Number | Description |
|-----------------|--|
| LB-4x6/12-25mm | Kit for an optical table of size 4'x6' (or equivalent metric table) Spacing of first hole from edge of table is ½" (12.5mm) or 1" (25mm) |
| LB-4x6/37-50mm | Kit for an optical table of size 4'x6' (or equivalent metric table) Spacing of first hole from edge of table is 1½" (37mm) or 2" (50mm) |
| LB-4x8/12-25mm | Kit for an optical table of size 4'x8' (or equivalent metric table) Spacing of first hole from edge of table is ½" (12.5mm) or 1" (25mm) |
| LB-4x8/37-50mm | Kit for an optical table of size 4'x8' (or equivalent metric table) Spacing of first hole from edge of table is 1½" (37mm) or 2" (50mm) |
| LB-4x10/12-25mm | Kit for an optical table of size 4'x10' (or equivalent metric table) Spacing of first hole from edge of table is ½" (12.5mm) or 1" (25mm) |
| LB-4x10/37-50mm | Kit for an optical table of size 4'x10' (or equivalent metric table) Spacing of first hole from edge of table is 1½" (37mm) or 2" (50mm) |

Patent pending

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