

3. PhotonSafe® Laser Protecting Curtains

Laser welding curtains - Certified Laser Curtains

Laser welding curtains and barriers or panels play a crucial role in creating a safe working environment when using lasers for welding or lasers for other applications. Laser welding curtains are designed to block or attenuate the laser radiation, preventing it from escaping the designated work area and reducing the risk of accidental exposure to personnel. They are an important component of an overall laser safety program, which includes proper training, the use of personal protective equipment (such as laser welding safety glasses), and adherence to established safety protocols.



Size and Configuration:

Laser welding curtains come in various sizes and configurations to suit different work areas and applications. They can be hung from ceiling tracks or mounted on frames to create a protective barrier around the laser welding station.

Our laser welding panels can be daisy-chained together on wheels enabling you to move the panels around as you need. The panels are connected by one foot and one and half foot dividers enabling you to create corners and folds as needed. The panel systems can act in a very similar way to a shower curtain

with the additive feature of being mobile.

Before implementing laser welding curtains, panels or barriers it's important to consult with a laser welding safety expert and follow the guidelines provided by regulatory authorities to ensure the curtains and barriers effectively mitigate the risks associated with laser radiation and welders flash to the area in question.

Protection values according to EN 60825-4

Standard IEC 60825-4 is the only accepted standard for laser welding or laser cleaning protection curtains or protection screens



DIN EN 12254:2012-04 : This standard applies to supervised screens for installations in working places at which laser radiation up to a maximum mean power of 100 W or single pulse energy of 30 J .

DIN EN 12254:2012-04 is NOT an accepted norm for Laser Welding

Laser Laser Safety Curtain Weld-Curtain

The laser safety Welding curtain is suitable for delimiting laser welding areas to block direct scattered light from the welding laser. Standard widths to 1,5 m with heights of 2,0m 2,2m 2,70 m Can be manufactured to exact dimensions. Several curtains can be firmly connected with Velcro or zipper so that, for example, a rectangular work area can be delimited. Suitable rail systems for mounting the curtain directly to the ceiling or suspended from a high ceiling with vertical rods are optionally available..

- CE certified according to the standard EN 60825-4
- Flame retardant (M2 protection level to NFP 92-503)
- Material: Both sides black
- Thickness 1.4 mm
- Curtain weight: 1.7 kg/m²
- Surface easy to clean
- Eyelets (diameter 10 mm, standard spacing 230/240 mm) and metal hooks on the top edge
- Matching curtain track or frame available
- Attachment of additional screens possible (to cover the gap between the rail and the upper edge of the curtain)
- Attachment of Velcro or zipper possible
- Connection with interlock system possible (optional)
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Please note that the curtain material only protects shortly against direct laser light from laser welding and is intended for stray light from the laser when using a hand-held laser welding device. It is necessary for the laser protection officer in your company to confirm as part of a risk assessment that the maximum permissible radiation levels of the curtain are not being reached or exceeded. Scattered radiation, which can escape upwards, downwards or sideways, must be evaluated by the laser safety officer with regard to maximum permissible radiation levels depending on the on-site situation. Additional laser protection measures may be required.

| PhotonSafe Pro Safety Curtain | PhotonSafe Pro Curtain | Model | Type | dimensions | reference | Euro |
|--|---------------------------------------|-------------|---------|-------------|------------------|-----------|
| | Hanging | Model C-Pro | 1520-CP | 1500 x 2000 | LLSECUR-CP150200 | € 1.153,4 |
| | only curtain | | 1525-CP | 1500 x 2500 | LLSECUR-CP150250 | € 1.441,7 |
| | | | 1527-CP | 1500 x 2700 | LLSECUR-CP150300 | € 1.557,5 |
| EN60825/IEC60825/GB7247 | Ceiling - Hanging | Model H-Pro | 1520-HP | 1500 x 2000 | LLSECUR-HP150200 | € 1.338,2 |
| PEL = 5,43 MW/m ² | Included track kit | | 1525-HP | 1500 x 2500 | LLSECUR-HP150250 | € 1.626,5 |
| PEL = 543,4 W/cm² | | | 1527-HP | 1500 x 2700 | LLSECUR-HP150300 | € 1.739,9 |
| 1070 nm - T= 100Sec | | | | | | |
| r = 2,509 mm=> D=5,0mm | Wall mounted-Hanging | Model W-Pro | 1520-WP | 1500 x 2000 | LLSECUR-WP150200 | € 1.338,2 |
| | Included track kit | | 1525-WP | 1500 x 2500 | LLSECUR-WP150250 | € 1.626,5 |
| photonSafe defender pro | | | 1527-WP | 1500 x 2700 | LLSECUR-WP150300 | € 1.739,9 |
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| | Hanging on freestanding frame | Model F-Pro | 1520-FP | 1500 x 2135 | LLSECUR-FP150213 | € 1.330,8 |
| | included alu frame and swivel casters | | 1525-FP | 1500 x 2635 | LLSECUR-FP150263 | € 1.663,5 |
| | | | 1527-FP | 1500 x 2835 | LLSECUR-FP150283 | € 1.796,6 |
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| other dimensions on demand | | | | | | |
| view window can be installed as option | | | | | | |