

Overly Wood Bullet Resistant Door Units Hardware Requirements and Recommendations

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For all Overly wood bullet resistant door units, all of the information for the hardware scheduled to be utilized on the opening must be supplied prior to fabrication to ensure its compatibility with the construction of the UL 752 level of protection selected for the unit. Below are some general guideline requirements and recommendations for hardware components to consider when utilizing a wood UL 752 Overly bullet resistant door unit.

Hinges

For UL 752 levels 1, 2, 3 and 6 protection, Overly recommends the use of 5" heavy weight ball bearing type or a continuous hinge capable of carrying the weight of the door leaf. If a continuous hinge is to be customer supplied for these level doors, all drilling and fastening of the hinges will be the responsibility of others, as Overly will only reinforce as required by continuous hinge manufacturer. The weight per square foot of these bullet resistant door level can be found on the individual product cutsheets found on our website.

For UL 752 levels 4, 5, 7 and 8, Overly supplies the continuous hinge with the door and frame already pre-drilled and tapped for field installation. Wood door will require drilling and fastening in the field. There can be no deviations from the Overly supplied hinge for these UL 752 levels of protection.

Locksets

All wood bullet resistant doors must be equipped with a minimum BHMA grade 1, 2 or 3 mortise lock or BHMA grade 2 cylindrical lock. Panic devices of the mortised or rim type are also permitted. Consult the factory for any concealed hardware devices to see if they can be integrated into your specific protection level required.

Lockmasters LKM 10K series locks cannot be used on any level of wood bullet-resistant doors due to having to remove too much of the bullet-resistant liner material for its mounting preparation. Doors can be made utilizing this lock, but will not be able to bear the physical UL Bullet-resistant rating label.

Please note that some levels of wood bullet-resistant doors are thicker than 1-3/4". The door thickness of the bullet resistant doors can be found on the individual product cutsheets found on our website. Locksets are intended to be centered in the door thickness and extended spindles, trim screws and cylinders may be required and is the responsibility of party supplying the lock. Also be sure to have the correct strike supplied with your lock that will be required for the door thickness/lock position being supplied.

Locks can be positioned off-center but factory must be notified that such a position is being required. Any extended spindles, trim screws and cylinders may be required for this are the responsibility of party supplying the lock.

Electric Strikes

Electric strikes can be incorporated into the bullet-resistant door units. Contact factory to verify if your specific model can be used in the level protection your project requires.

Please note that some levels of wood bullet-resistant doors are thicker than 1-3/4". The door thickness of the bullet resistant doors can be found on the individual product cutsheets found on our website. Locksets are intended to be centered in the door thickness and this may affect the ability to use the electric strike you have chosen.

Locks can be positioned off-center in order to accommodate some electric strikes but factory must be notified that such a position is being required.

Closers

Overly recommends the use of surface mounted closers for all of its wood bullet resistant doors and frames. Closers must be capable of handling the weight of the door leaf. The weight per square foot of this bullet resistant door level can be found on the individual product cutsheets found on our website. Consult the factory for any concealed hardware devices to see if they can be integrated into your specific protection level required.

Hold-open Devices

While hold-open devices of any type are discouraged from being utilized on bullet resistant doors as they compromise the protection while being in the open position, if they must be used, Overly recommends the use of surface mounted types for all of its bullet resistant doors and frames. Hold-opens must be capable of handling the weight of the door leaf. The weight per square foot of this bullet resistant door level can be found on the individual product cutsheets found on our website. Consult the factory for any concealed hardware devices to see if they can be integrated into your specific protection level required.

Door Position Switches

Overly bullet resistant doors and frames can be prepared for door position switches of the surface mounted and most mortised types. Consult factory to determine if your specific mortised type switch can be utilized.

Power Transfer and Raceways

Overly bullet resistant FLUSH wood doors and frames can be prepared for electric hinges, power transfers with raceways as required for all electrically operated hardware. Doors with vision lights can be prepared as long as the size and position of the light do not interfere with the location of the conduit raceway path inside the doors which is based on UL bullet resistance level.

Electrified Level Swing Hinges used to transfer power from frame to door

When electrified hinges are to be utilized on a wood bullet-resistant door system, there are two features that need to be verified prior to using: Load Bearing - the first item to verify is if the electrified hinge selected to be used is considered a load bearing hinge or not by the hinge manufacturer. If the manufacturer has designated the hinge as load bearing, then it can be utilized at any hinge location, typically one if the intermediate hinges of the unit. If it IS NOT a load bearing as designated by the manufacturer, then the electrified hinge must be utilized as an additional hinge to the quantity required of load bearing hinges. The quantity of load bearing hinges follows the one hinge for every 30" of height requirement.

Fire Ratings - when units are scheduled to be fire rated, verification from the manufacturer is required that the electrified hinge is UL Listed for use on fire doors equal to or greater than the scheduled hourly duration of the opening.

Power Transfers used to transfer power from frame to door

In lieu of electrified hinges for use on wood bullet-resistant door models, power transfers, or EPT's, may be utilized. Any power transfer model may be selected and incorporated into the door and frame.

Armored Door Cords used to transfer power from frame to door

As an option to an electric hinge or power transfer, an armored door cord or loop could be utilized. When units are scheduled to be fire rated, the armored loop must be UL Listed for use on fire doors equal to or greater than the scheduled hourly duration of the unit. An example of one that meets this criteria is the Schlage 788/789 armored Door Cord.

Weatherstripping, Door Bottoms and Thresholds

While Overly wood bullet resistant doors and frames are intended for interior applications only, they can be utilized with commercial weatherstripping, and thresholds when required. When automatic door bottoms are required any auto door bottom to be used must be surface mounted.

Concealed Hardware

The use of any hardware of the concealed type is limited and not recommended for use on Overly wood bullet resistant doors and frames. Consult factory before specifying the use of any concealed hardware on a bullet-resistant unit.

Vision Lights

Overly wood bullet resistant doors and frames can be prepared for vision lights. Those doors that are prepared for vision lights cannot be UL fire rated.

UL Levels 1, 2 and 3

These levels come factory glazed with a polycarbonate glazing held in place with a metal framing system. The minimum width of viewable light that can be accommodated in these levels is 3" and maximum length is 66". The maximum light size that can be incorporated into the door leaf is determined by the 10" minimum stiles, 6" minimum top rail for narrow lights and 8" for lights where width may interfere with door closer mounting, and 12" minimum bottom rail dimensions that must be maintained.

UL Levels 4, 5 and 8

These levels are supplied with Glass Clad Polycarbonate (GCP) and a metal framing system shipped loose for field installation. The minimum viewable light size that can be accommodated with the glass clad polycarbonate that Overly supplies is 11" x 11". The maximum light size that can be incorporated into the door leaf is determined by the 8" minimum stile, 6" minimum top rail for narrow lights and 8" for lights where width may interfere with door closer mounting, and 12" minimum bottom rail dimensions that must be maintained.

UL Levels 6 and 7

Glazing is not available from Overly at this time for these levels.

However, for levels 4, 5, 6, 7 and 8, bullet resistant glazing may be supplied by others as long as it is UL 752 rated the same as the door and frame. A data sheet of the proposed glazing material must be provided to Overly for review and authorization that it can be utilized for the unit to maintain the UL 752 rating.

Door Viewers

For any wood bullet resistant door, the use of a non UL-752 listed door viewer will void the bullet -resistant rating. In order to be able to apply the UL 752 Bullet Resistant certification label to the door, the door viewer to be used is required to be UL 752 rated to the same level performance as the door itself.

Meeting Stiles of Pairs

For any pair of Overly UL 752 bullet resisting wood doors, they must be equipped with an overlapping metal astragal which has a UL 752 protection level equal to that of the doors. This creates an active leaf and an in-active leaf. The in-active leaf can be held in the closed position by either flush bolts or surface mounted slide bolts. This overlapping astragal precludes the use of two vertical rod devices allowing both leaves to be active. If both leaves must be active, a mullion rated to same protection level as the doors must be used of either the hardware or thru type with a UL 752 bullet resisting rating as the unit. Non-UL 752 rated mullions CANNOT be utilized on UL 752 rated units.

Flushbolts for In-Active Door leaves

When flushbolts are to be used on the in-active leaf of wood bullet-resistant pairs, they are to be of the corner mount type. They can be of the manual, semi-automatic or automatic activation.