

Specification — Center Lead Construction Lined Wood Doors

A&L Shielding's wood doors are designed to contain various levels of shielding protection and can be equipped with a variety of hardware.

Lead Lined Wood Doors — Center Lead Construction

GENERAL:

These doors are designed to provide an appearance equal to premium grade architectural wood doors while providing radiation protection. They are constructed to support the high weight resulting from lead shielding located in the center of the door. The basic concept of the design permits most normal architectural hardware to be used in the final door and frame assembly. These doors provide equal performance and appearance to unlined wood doors.

Doors comply with ANSI/WDMA 1.S.1-A requirements for particleboard construction. Doors will use wood veneer faces and hardwood stile edges. Edges allow the lead lining to be visible for verification after installation. Workmanship and tolerances are kept strictly to standards.

PRODUCT DETAILS:

CORE AND EDGES – The core of these flush doors will consist of two high density particle boards separated by a sheet of lead meeting Federal Specification QQ-L-201F, Grade C. This lead is 99.9 percent pure.

The core includes matching hardwood stiles. This core, lead and face veneer are assembled with adhesive applied under pressure. Fire ratings are not available with center lead construction.

LEAD LINING – Provide a continuous lead sheet of the specified lead thickness for the opening. Locate lead in the center of the door, extending to all edges.

LITE OPENINGS – Supply a lead lined metal vision kit and lead glass for the size and label requirements

of the project. Lite openings may extend to within 3-1/4" of the edge of the door or edge of cutout for lock hardware. Double glaze where required by local/national codes.

A flush or raised wood trim kit in maple or oak with lead lining also is available at time of manufacture if a matching wood finish is desired.

FINISH – Doors are shipped unfinished for final finishing at jobsite. Factory edge sealing is available as an option if this does not affect final door finish.

WARRANTY – A standard warranty for one year from date of shipment is standard for lead lined doors. A limited life of original installation warranty is available as well and must be specified at time of order.

EXECUTION:

Installation should conform with the latest issue of DHI's "Installation Guide for Doors and Hardware." Special emphasis should be placed on the selection of a proper hinge system and frame attachment for the wall because of the high weights involved with lead lined doors.



268 Old Lindale Road
Rome, Georgia 30161

Phone Toll Free: 800-329-5323
Fax Toll Free: 800-329-5320
e-mail: alshield@alshielding.com
Internet: www.alshielding.com

Technical Data — Center Lead/Lead Lined Wood Doors

Product features, specifications and details (interior only)

Thickness	1-3/4" to 2-1/2" (44.45mm to 63.5mm). SEE NOTE 1	<p>These radiation shielding doors are recommended for architectural use in hospitals, medical clinics, laboratories and anywhere the possibility of radiation exposure exists. The amount of lead required in these doors must be determined by a licensed radiation shielding physicist.</p>
Maximum Size	4'0" x 8'0". Sizes greater than 4080 subject to mill acceptance. Pairs are available up to 8'0" x 8'0".	
Faces	3-ply door skin. Wood veneer, reconstituted veneer, MDO or decorative laminates available. Crossbanding is included as part of the door skin.	
Stiles	2" prefit with matching hardwood.	
Rails	3" prefit with matching or mill option hardwood.	
Adhesive	Type 1 (waterproof) for core and doorskins.	
Core	High density particleboard core divided by lead in the center.	
Lead Thickness	1/32" to 1/2" (0.79mm to 12.7mm). Lead thickness must be specified per shielding study recommendations. For lead lined doors requiring lead thicker than 3/8", center lead construction must be used.	
Door Lites	Total area of the cutout cannot exceed 40 percent of door area (30" wide or 54" high maximum). 1,296 sq. in. maximum clear lite. Lites are not available on doors with lead greater than 1/8" because of the thickness of the glazing. SEE NOTE 2	
Machining	Factory fitting and machining available. SEE NOTE 3	
Finishes	Unfinished, for field finishing. Factory edge sealing available.	
Warranty	One year from date of shipment is standard. Other terms up to limited original life of installation are available from the factory and must be specified at time of order.	
Fire Rating	For lead thickness over 3/8". ITS-Warnock Hersey 20-minute NP and PP fire labels for single doors up to 4'0" x 8'0" and pairs up to 8'0" x 8'0". SEE NOTES 6, 7 and 8	

NOTES:

1. Door thickness for lead above 1/16" varies as lead thickness varies. Consult factory for actual lead thickness and any special frame requirements.
2. Minimum distance from the edge of any opening to the edge of any hardware cutout for non-labeled, center lead doors is 5" for labeled doors.
3. Door weights are high due to lead content. Select hardware accordingly.
4. Use of A&L Shielding wood doors in exterior applications is not recommended and not warranted.
5. Consult local code authorities for safety and fire label requirements that may apply at the installation location concerning light openings and glazing.
6. For both Category A (door installed) and Category B (frame installed) systems.
7. For paired openings, a lead lined astragal must be used to prevent radiation leaks at the meeting stiles.
8. For fire labels at 1/4" lead and below, **CORECLAD®** outer lead design is supplied.



268 Old Lindale Road
Rome, Georgia 30161

Phone Toll Free: 800-329-5323
 Fax Toll Free: 800-329-5320
 e-mail: alshield@alshielding.com
 Internet: www.alshielding.com