

CS Acrovyn® Doors

Transport, Storage, Installation, Cleaning & Maintenance Instructions

To preserve the fine qualities of the Acrovyn Door System and a lifetime of superior service, proper transport, storage, handling, finishing and installation is very important. The following guidelines will help to maintain the high quality products supplied by Construction Specialties, Inc.

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Transport, Storage, Handling and Finishing

Transport, Storage & Handling

1. Acrovyn® is dimensionally influenced by temperature extremes.
2. Wood is hygroscopic and dimensionally influenced by changes in moisture content caused by changes within its surrounding environment. Wood doors should not be subject to abnormal heat, extreme dryness, extreme humidity or sudden changes therein.
 - a. Do not subject doors to extremes of heat and/or humidity.
 - b. Do not allow doors to come in contact with water.
 - c. Prolonged exposure may cause damage.
 - d. *Shipping containers and/or buildings where humidity and temperature are controlled provide the best transport/storage mediums.*
 - The recommended conditions humidity on both sides of an interior door must be at a consistent level and not less than 25%, nor greater than 55% Relative Humidity and
 - Temperature must not be less than 50°F (10°C), nor greater than 90°F (32°C).
3. Store doors flat on a level surface in a dry, well-ventilated building. Doors should not come in contact with water. Doors should be kept at least 4 in. (102 mm) off the floor and should have protective coverings under the bottom door and over the top. Covering should protect doors from dirt, water and abuse but allow for air circulation under and around the stack.
4. Do not transport or store doors in direct sunlight.
5. Do not install doors in buildings that have wet plaster or cement. Do not store doors in buildings with excessive moisture content – HVAC systems should be operating and balanced.
6. Doors should always be handled with clean dry hands or while wearing clean dry gloves.
7. Doors should be lifted and carried when being moved, not dragged across one another.

Finishing

1. To assure uniform moisture exposure and dimensional control, all surfaces must be laminated equally.
2. The top and bottom rails sealed. Cutouts for hardware in exterior doors and doors located adjacent to areas where high moisture is expected should be sealed prior to installation of hardware.

Installation Instructions

1. The utility or structural strength of the doors must not be impaired when fitting to the opening, in applying hardware, in preparing for lights, louvers, plant-ons or other detailing.
2. Use two hinges for solid core doors up to 60 in. (1524 mm) in height, three hinges up to 90 in. (2286 mm) in height or portion thereof. Use heavy weight hinges on doors over 175 lbs. (79 kg). Pivot hardware may be used in lieu of hinges. Consult hardware manufacturer with regard to weight and size of hinges or pivots required.
3. The maximum clearance between the top, hinge edge and lock edge to the frame and meeting edge of pairs of doors, is 1/8 in. (3.2 mm).

Fire doors: Maximum clearance between the door and the frame and between the meeting edges of doors in pairs shall not exceed 1/8". The clearance between the bottom of the door and a raised non-combustible sill shall not exceed 3/8". Where there is no sill the maximum clearance shall not exceed 3/4" from the bottom of the door to the non-combustible floor.

4. All hardware locations, preparations and methods of attachment must be appropriate for the specific door construction. Templates for specific hardware preparation are available from hardware manufacturers or their distributors.
5. When light or louver cutouts are made for exterior doors, they must be protected in order to prevent water from entering the door core.
6. Pilot holes must be drilled for all screws that act as hardware attachments. Full threaded screws are preferable for non-rated doors and are required on fire-rated doors. Self-tapping or combination wood/metal screws are not to be used on wood doors.
7. In fitting non-rated doors for height, do not trim top or bottom edge by more than 3/4 in. (20 mm) unless accommodated by additional blocking. Trimming of fire-rated doors must be in accordance with NFPA 80.
8. Doors and door frames should be installed plumb, square and level.

Installation Instructions for Fire Doors & Smoke Control Doors

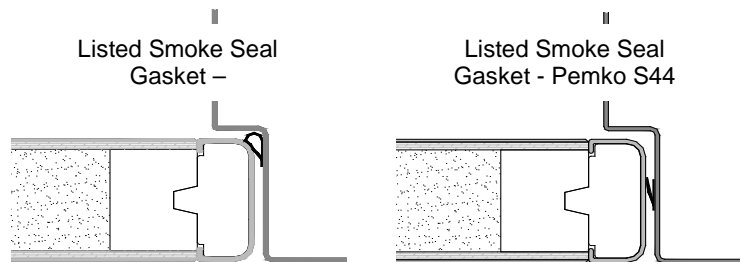
For **Category "A"** Doors an edge sealing system is not required within the opening.

1. CS Acrovyn Doors have been labeled for compliance with UBC 7-2 (97) Positive Pressure and do not require the application of an additional edge sealing system. Acrovyn Door labels are affixed on top rail due to replaceable edges.

2. Doors shall be installed in listed and labeled 16 gauge steel frames.
3. Trimming for height may be done on the bottom rail only, maximum 3/4" [19 mm] allowed on site, per NFPA 80.
4. Surface mounted hardware shall be attached with through-bolts unless inner blocking is provided.
5. A maximum 1/8" [3.2 mm] clearance between door and frame and meeting edges is allowed.

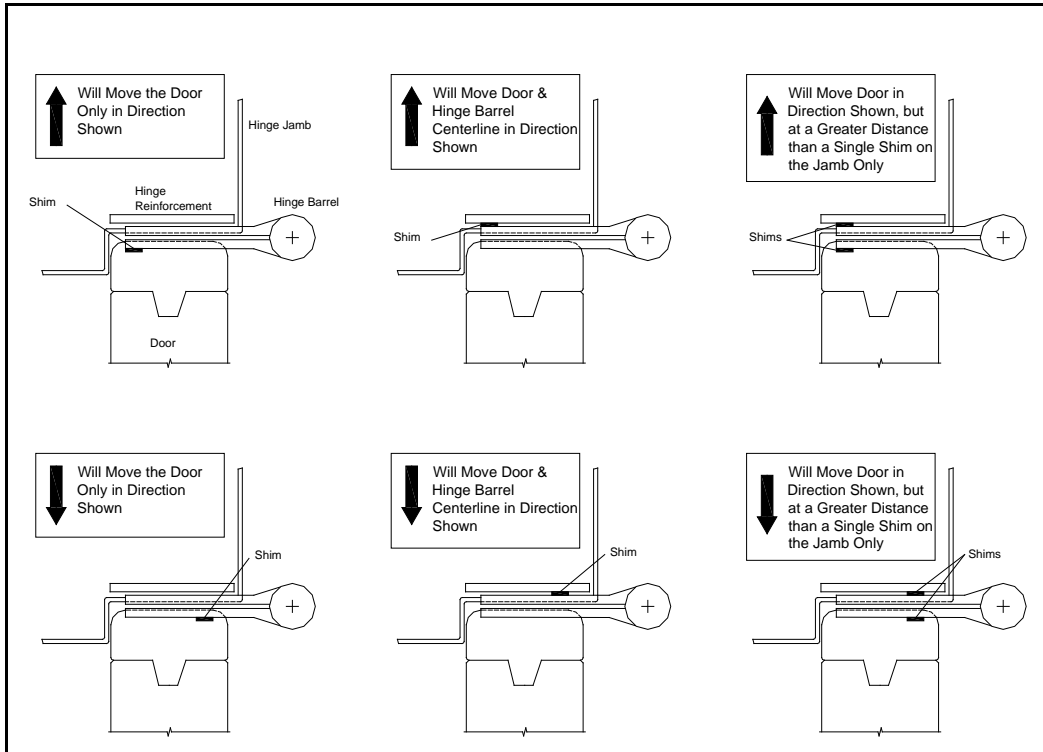
Note: For smoke rating, a listed and labeled Category "H" smoke and draft control gasket shall be installed to the opening. Category "H" smoke and draft control gaskets shall be listed for compliance with test procedure UBC Standard 7-2 (97), Parts I & II. Pemko S88 or S44 on jambs and header and S77 at meeting edges of pairs are eligible for "S" label without use of any other smoke and draft control gaskets.

Hardware machining and cutouts for lights can **only** be performed by the factory or by a certified machining distributor. Positive pressure fire rated, listed hardware, light frames and glazing shall be installed per the manufactures instructions.



Adjustment and Maintenance

1. Insure that all doors swing freely and do not bind in their frame. Adjust the finish hardware for proper alignment, smooth operation and proper latching without unnecessary force or excessive clearance.
2. Review with the owner/owner's representative how to periodically inspect all doors for wear, damage and natural deterioration.
3. Review with the owner/owner's representative how to periodically inspect and adjust all hardware to insure that it continues to function as it was originally intended.
4. Finishes on exterior doors may deteriorate due to exposure to the environment. In order to protect the door it is recommended that the condition of the exterior finish be inspected at least once a year and re-finished as needed. Both exterior and interior finishes will change color over time.
5. Sometimes a door must be shimmed or moved because the door is uneven in the frame, the gap between pairs is too large or the gap exceeds the NFPA 80 maximum of 1/8". The method shown in the following details can move a door as much as 3/16", depending on the thickness of the shims. The shims should be 1/4" wide and the length should be equal to the height of the hinge. When shimming is necessary, NFPA 80 requires metal shims to be used on fire-rated openings.



Cleaning and Touchup

1. Inspect all doors prior to hanging them on the job. Repair noticeable marks or defects that may have occurred from improper storage or handling.
2. Field repairs and touchups are the responsibility of the installing contractor upon completion of the initial installation. Field touchup shall include repair of job inflicted scratches and mars, and final cleaning of finished doors.

Acrovyn Doors can be cleaned by following these instructions:

1. Light soil, crayon, lipstick, blood and other mild staining agents can be removed using a Mr. Clean® Magic Eraser in concert with water or a household cleaner such as Fantastik®, Formula 409®, or equivalent product.
2. Stubborn stains, such as ball point pen, permanent marker, dry erase marker and shoe scuffs can be removed using a Mr. Clean® Magic Eraser in concert with denatured alcohol, isopropyl alcohol or ethyl alcohol. When using alcohol, care must be taken not to permanently mar the Acrovyn surface. Also, when using the Mr. Clean® Magic Eraser always scrub with the grain of the Acrovyn. Always follow with soap and water to remove any residue.
3. Acrovyn Doors may be cleaned with Betco's "Best Bet" product if the following conditions are met:
 - A. The Best Bet product is applied by hand with a soft towel or rag.
 - B. The cleaning motion is performed with hand pressure only and with the grain. – the use of any mechanical device such as a buffing machine is prohibited.
 - C. After cleaning, the area is wiped down with a damp cloth to remove any leftover Best Bet residue.

4. To add additional protection and luster to the cleaned surface, a coat of spray wax or vinyl enhancer may be applied. Recommended brands are Johnson Wax®, Pledge® or Armor All®.

Note: In the event that the cleaning steps outlined above do not adequately restore Acrovyn surfaces, please call us toll free at 1-800-416-6586 for further assistance.

Care must be exercised if fingernail polish remover or acetone is used to remove stains. These chemicals will temporarily soften the surface of the Acrovyn. Moisten a cotton cloth and work in small areas. Immediately remove cleaner with straight water. Do not use methyl ethyl ketone (MEK), cleaners containing MEK, bleach or any other cleaners containing harsh solvents on Acrovyn Doors. Powdered cleaners are not recommended, as they are abrasive and tend to leave a residue if not utilized properly.

Do not use Scotch-Brite® pads, steel wool or cleaning pads such as Brillo® or S.O.S.® on Acrovyn Door faces or edges.

Stile & Edge Replacement

The door edge and stile may be easily replaced using the following procedure.

For this demonstration, we will focus on the stile on the hinge side of the door since it requires taking the door off of the hinges.

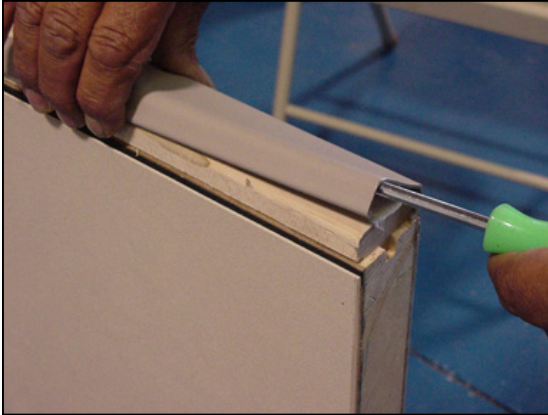
Stile replacement on the latch side of the door may be performed with the door still in place. (This is true for Acrovyn edges only. Stainless Steel edges will require door removal from the hinges.)



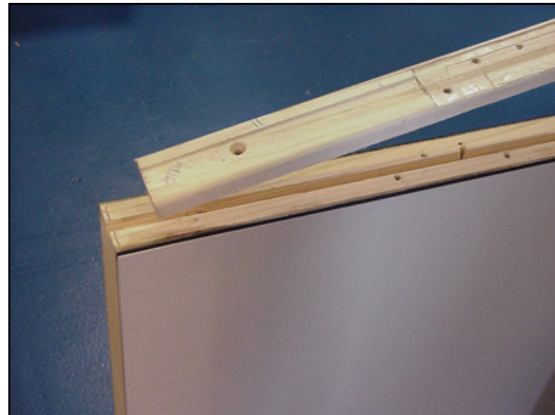
1. Begin by removing the door from the hinges.



2. The Acrovyn® edge can be removed by inserting something like a flat blade or a screwdriver at the top between the edge and stile and disengaging the return leg from the stile. Once the edge has been removed several feet from the top of the door, strip the remaining portion by pulling it off the door.



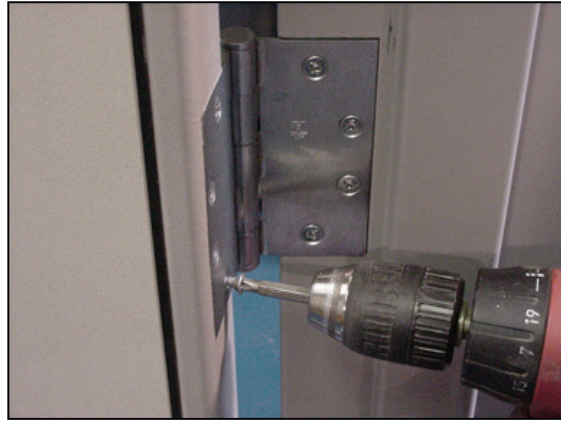
3. If the hardwood stile must also be replaced, unscrew and remove the damaged hardwood stile. Move to STEP 7 if the hardwood stile does not need to be replaced.



4. The replacement stiles will be pre-drilled and countersunk, ready to be installed. Simply position the stile and secure it to the door. Be careful not to over torque the screws. The new edge can be installed by hooking one leg into the groove between the door and stile and snapping the other leg over the stile and into the groove.



5. Align and reinstall the door to the hinges that were left in the doorframe. DO NOT over tighten, causing them to strip.



6. Hinge stile and edge replacement is complete.

NOTE: If lock/strike stile and edge replacement is necessary, the removal and replacement procedure is similar to the one described above.

CS GROUP is one of the world's leading suppliers of doors, and door and wall protection products. We will gladly offer assistance and advice upon request. Please visit our website at www.csgroup.com for more information on CS products.

