## **MARKETING BULLETIN**

## **REPAIRING DAMAGE/DEFECTS IN A** 2-HOUR AREA SEPARATION WALL SYSTEM

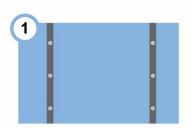
The 2-hour fire rated Area Separation Wall System was developed over 50 years ago as a way to economically protect from fire two (2) separate units in apartments, townhomes, condominiums and duplexes. At times during the installation of the ASW system, mistakes are made or damage occurs to this assembly - and for that reason American Gypsum performed a 2-hour full scale fire test per ASTM E119, with repairs to defects in this wall system. NOTE - only American Gypsum's 1" M-Bloc Shaft Liner and 1" M-Glass Shaft Liner panels are approved for use in fire test report - WFCi 19046.

Below you will find one of the defects that was built into American Gypsum's Area Separation Wall System (UL U375), and how to successfully repair it in the field to ensure that the 2-hour fire rating is preserved.

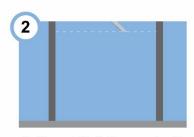
DAMAGE OR DEFECT: REMOVAL AND REPLACEMENT OF SHAFT LINER PANELS	MAGE OR DEFECT:	DAMAGE OR DEFECT: REMOVAL AND REPLACEMENT OF SHAFT LI	NER PANELS
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- **ISSUE:** Once the ASW System is installed, unforeseen weather can occur with water or moisture pooling at base of the wall, producing mold growth. If the 1" Shaft Liner panels must be replaced, follow these steps.
- **REPAIR:** First, secure 1" Shaft Liner panels above the affected area, by inserting 3" drywall screws through the flange face of the H-stud, both layers of 1" Shaft Liner panels and through backside flange of H-Stud. A total of 3 drywall screws are inserted in both sides of this ASW cavity, spaced 6" on center
  - At a maximum of 2' from the base of the ASW system wall, a horizontal cut is made by saw through both 1" Shaft Liner panels, making sure to also partially cut into one (1) of the H-Stud flanges
  - Flatten the C-Runner bottom track on one (1) side of the wall, and peel back the flange of the H-Stud that was cut
  - ✤ Remove both cut pieces of 1" Shaft Liner panels that are in question
  - Apply a bead of 3M Fire Barrier Sealant CP 25 WB+ fire caulk to the exposed Shaft Liner panels above, and to the vertical H-Studs and horizontal C-Runner Track base
  - Replacement pieces of 1" Shaft Liner panels are cut to fit tightly into the voided area and inserted one at a time (apply fire caulking between these pieces of 1" Shaft Liner panels)
  - Push back into place the H-Stud flange that was peeled back and the C-Runner bottom track (lightly tapping with a wood block and a hammer helps)
  - ✤ Apply fire caulk around the perimeter of inserted 1" Shaft Liner panels on both sides of the ASW wall system, and then remove the 3" drywall screws securing the Shaft Liner panels above
  - On side of wall were the H-stud was cut, a section of metal flat strap is vertically centered over the H-Stud minimum 4" in width by 26" long (14 gauge), and secured with 1/2" Tek #8 self-drilling screws, spaced 6" on center (do not secure flat strap to C-Runner Track)
  - Apply fire caulk around the perimeter of the metal flat strap
  - On both sides of the ASW System, center a piece of 5/8" FireBloc Type X wallboard over the joint where the 1" Shaft Liner replacement panels meet the Shaft Liner panels above, applying fire caulk to back of this drywall patch (form of a "X")
  - Attach corners of patch to metal H-studs with 1-1/4" drywall screws, and then along top and bottom edges of patch, apply 1-1/2" Type G laminating screws, 6" on center to secure drywall patch to Shaft Liner panels
  - Once in place, apply fire caulking around its perimeter

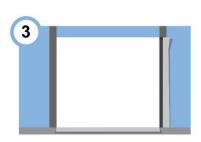




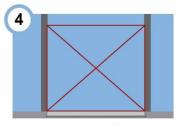
Before removal, secure the Shaft Liner panels above using 3" drywall screws. Insert screws through H-Stud, Shaft Liner panel and H-Stud on opposite side of the wall



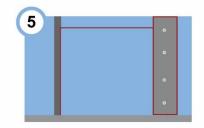
Cut through Shaft Liner panels with a saw, and slice into flange of the H-Stud



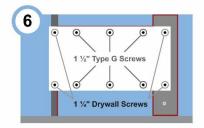
Bend back the flange of H-Stud, flatten the C-Runner track and then remove the Shaft Liner panels



Fill the voided area with tight fitting Shaft Liner panels, applying 3M Fire Barrier Sealant CP 25WB+ fire caulk between the two pieces



Once the H-Stud flange, and C-Runner track are bent back in place - center over the H-Stud flange, metal flat strap and secure with ½" Tek #8 self-drilling screws spaced 6" o/c



Center a piece of 5/8" FireBloc Type X wallboard over the horizontal Shaft Liner joint and secure as shown