

TECHNICAL SERVICES BULLETIN

REPAIRING DAMAGE/DEFECTS IN THE 2 ½ HOUR ME AREA SEPARATION FIREWALL SYSTEM

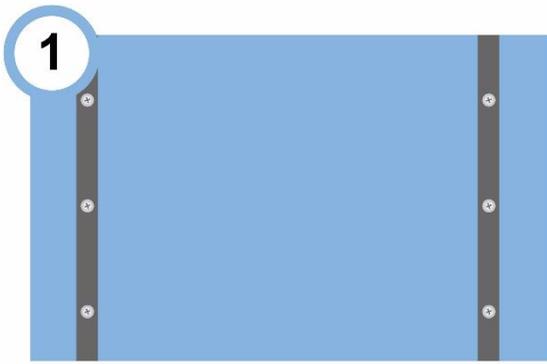
The 2 ½ hour fire rated ME Area Separation Firewall System was released to the industry in March 2022 as a way to isolate sound and protect from fire two (2) separate living units in townhomes, twin homes, duplexes, condominiums and apartments. At times during the installation of the ME ASF system, mistakes are made or damage occurs to this assembly, and for that reason American Gypsum performed a full scale fire test per ASTM E119, with repairs to defects in this wall system. (Report - WFCi 21080)

Below is one of the defects that was built into American Gypsum's ME Area Separation Firewall System (UL design V344), and if needed how to successfully repair it in the field to ensure that the 2 ½ hour fire rating is preserved.

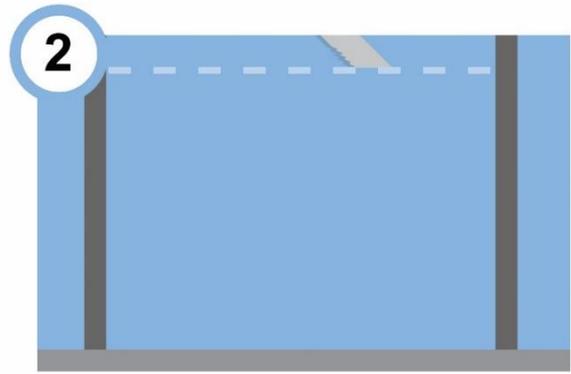
DAMAGE OR DEFECT:	REMOVAL AND REPLACEMENT OF 1/2" M-BLOC® EKCEL® TYPE X with MOLD & MOISTURE RESISTANCE
--------------------------	--

ISSUE: Once the ME Area Separation Firewall System is installed, unforeseen weather can occur with water or moisture pooling at base of the wall, producing mold growth. If the 1/2" M-Bloc Ekcel Type X wallboard panels must be replaced, follow these steps.

- REPAIR:**
- First, secure 1/2" M-Bloc Ekcel Type X wallboard panels above the affected area, by inserting 3" drywall screws through the flange face of the H-studs, all four (4) layers of 1/2" M-Bloc Ekcel Type X panels and through backside flange of H-Studs. A minimum of three (3) drywall screws are inserted in both sides of this ASW cavity, spaced 6" o/c.
 - At a maximum of 2' from the base of the ME ASF system wall, a horizontal cut is made by saw through all four (4) layers of the 1/2" M-Bloc Ekcel Type X 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 all cut pieces of the 1/2" M-Bloc Ekcel Type X panels that are in question.
 - Apply a bead of 3M Fire Barrier Sealant CP 25 WB+ fire caulk to the exposed M-Bloc Ekcel Type X panels above.
 - Replacement pieces of 1/2" M-Bloc Ekcel Type X panels are cut to fit tightly into the voided area and inserted one at a time.
 - 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 M-Bloc Ekcel panels on both sides of the ME ASF wall system, and then remove the 3" drywall screws securing the panels above.
 - On side of wall where the H-stud was cut, a section of metal flat strap is vertically centered over the H-Stud – minimum 6" in width by 28" long (min. 25 gauge), and secured to H-Stud with #8, 3/4" panhead screws, spaced 6" o/c (do not secure flat strap to base C-Runner Track).
 - Apply fire caulk around the perimeter of the metal flat strap.
 - Now center a piece of 1/2" M-Bloc Ekcel Type X wallboard over the horizontal joint where new panels meet the existing panels above. This panel is a minimum of 12" in height by the width between H-Studs, and secured to each H-Stud with 1-1/4" drywall screws. Then along the top and bottom edges of this patch, use 1-1/2" Type G laminating screws spaced 6" o/c to secure to ME ASF wall system.
 - Once in place, apply 3M Fire Barrier Sealant CP 25 WB+ fire caulk around its perimeter of this drywall patch.
 - Duplicate metal flat strap, M-Bloc Ekcel wallboard patch and fire caulking on opposite side of the ME ASF wall system.



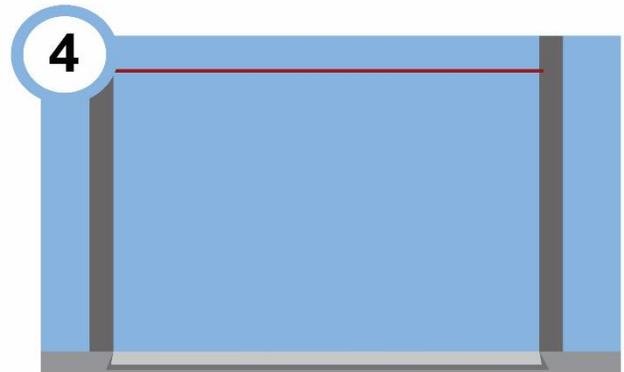
1
Before removal, secure the 1/2" M-Bloc Ekcel Type X panels above using 3" drywall screws. Insert screws through H-Stud, M-Bloc Ekcel panels and H-Stud on opposite side of the wall



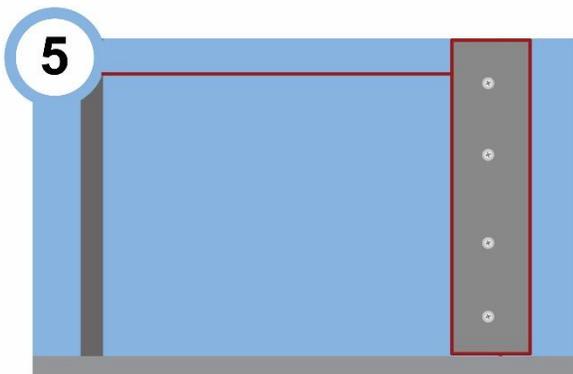
2
Cut through 1/2" M-Bloc Ekcel Type X panels with a saw, and slice into flange of the H-Stud



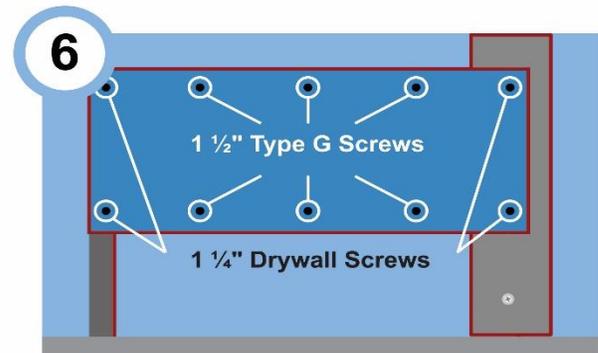
3
Bend back the flange of H-Stud, flatten the C-Runner track and then remove the 1/2" M-Bloc Ekcel Type X panels



4
Fill the voided area with tight fitting 1/2" M-Bloc Ekcel Type X panels, applying 3M Fire Barrier Sealant CP 25WB+ fire caulk the horizontal joint between the upper and lower panels



5
Once the H-Stud flange, and C-Runner track are bent back in place - center over the H-Stud flange, 6" metal flat strap and secure with #8, 3/4" panhead screws spaced 6" o/c. Once in place, fire caulk perimeter of metal flat strap



6
Center a piece of 1/2" M-Bloc Ekcel Type X wallboard over the horizontal wallboard joint. Secure as shown, and then fire caulk perimeter of the M-Bloc Ekcel Type X patch (duplicate metal flat strap and M-Bloc Ekcel patch repairs on opposite side of the wall)