

## **MR-MANUFACTURER**

USG® Area Separation Fire Wall Systems are manufactured by United States Gypsum Company, a leader in construction materials and building systems for 90 years.

## **PP-PRODUCT PRESENTATION**

USG Area Separation Fire Walls are remarkable developments for constructing common party walls with fire-resistive protection for adjacent properties. These lightweight, non-load bearing gypsum drywall assemblies are designed as vertical fire barriers for fire walls and party walls separating occupancies in wood-frame apartments and townhouses.

There are two basic systems: *solid type*, with independently framed interior gypsum panel surfaces both sides of fire wall or party wall; *cavity type*, with integral interior gypsum panel surfaces for commonly shared party walls between apartments.

## **Features**

**Fire Resistance** -- Both types of separation walls offer 2-hr. and 3-hr. fire ratings.

**Sound Isolation** -- STC ratings up to 60 with the solid system and 57 in the cavity system are available.

**Lightweight** -- These drywall assemblies weigh at least 50% less than masonry walls typically used. This fact speeds installation.

**Space-Saving** -- Use of these assemblies gains valuable floor space. Thickness is 3-1/2" to 4" for cavity-type walls, compared to 8" to 12" for a masonry wall without interior finish.

## **UA-USES, APPLICATIONS**

These systems were performance-tested in buildings up to four stories high (44') and with all common floor-ceiling heights found in multi-family housing. Both cavity and solid types are suitable for exterior walls with appropriate weather-resistant facing when building offsets are desired.

## **AI-ASSEMBLY, INSTALLATION**

*Solid-type wall* consists of two 1" thick SHEETROCK® brand Gypsum Liner Panels installed vertically between 2" USG Steel C-Runners. Panel edges are inserted in 2" USG Steel H-Studs spaced 24" o.c. C-runners are installed at top and bottom of wall and back-to-back between vertical panels cut to a convenient length above each intermediate floor. Studs are attached to wood framing at intermediate floors with 0.063" thick USG Aluminum Breakaway Clips which break away when exposed to fire, thus permitting a fire-damaged structure to fail while the fire barrier remains intact. An additional clip-to-stud attachment is required 5' o.c. below the top 23' of the building in buildings 23' to 44' high.

With 25-ga. steel H-studs, the assemblies are suitable for floor-to-ceiling heights (i.e. between clip angle supports) up to 10' under 5-psf lateral load and up to 8' as an exterior wall under 15-psf wind load without exceeding

L/240 allowable deflection.

With 2" THERMAFIBER® Sound Attenuation Fire Blankets (SAFB) stapled each side of liner panels, the assembly has obtained a 3-hr. fire resistance rating allowing separate selection and construction of tenant walls.

*Cavity-type wall* consists of steel USG C-H Studs and SHEETROCK brand Gypsum Liner Panels set in steel runners and faced both sides with SHEETROCK brand Gypsum Panels, Water-Resistant, FIRECODE® C Core. Liner panels, 1" thick, are erected vertically with ends set into 2-1/2" USG C-Runners and edges inserted into specially formed 2-1/2" USG Steel C-H Studs. C-runners are installed singly at top and bottom of wall and back-to-back between vertical liner panels on a line above each intermediate floor. Aluminum clips, which attach the studs to adjacent wood framing, break away in the same fashion as with solid-type walls. To improve sound transmission loss, THERMAFIBER SAFB are inserted in the stud cavity and RC-1® Resilient Channels (part of the family of SHEETROCK Metal Products) may be used to isolate the face layer.

With 212CH25 steel studs spaced 24" o.c., the systems are suitable for floor-to-ceiling heights up to 10' under 5-psf lateral load and up to 8' as exterior walls under 15-psf wind load without exceeding L/240 deflection. For buildings over 23' in height, use 400CH20 studs on the lower floors below the top 23' of the building.

#### **MF-MATERIALS, FINISHES**

Materials for USG Area Separation Wall Systems include SHEETROCK brand Gypsum Liner Panels, USG Steel C-Runners, USG Steel H and C-H Studs, and USG Aluminum Breakaway Clip.

#### **CS-COATINGS, SURFACING**

Joints and fasteners should be treated with appropriate SHEETROCK Joint System. When priming is required, SHEETROCK First Coat provides a superior first (prime) coat prior to decorating.

#### **TS-TECHNICAL SUPPORT**

For further information on specifications, design criteria and product performance, order catalog SA-925 USG Area Separation Wall Systems by calling toll-free 1-800-USG-4YOU (874-4968).

#### **CC-CODES, CERTIFICATION**

Code compliance: BOCA Report No. 87-63 and SBCCI Report No. 9137. Fire test: UL Design U336 for 2-hr. fire rating.

#### **OM-OPERATION, MAINTENANCE**

Contact local U.S. Gypsum Company Sales Office with any questions about maintenance and replacement recommendations.