Mull-it-Over Products Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-­Part Format, as described in the Project Delivery Practice Guide, including MasterFormat® and SectionFormat/PageFormat®*.*

This section must be carefully reviewed and edited by the Architect to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the drawings. Delete all “Specifier Notes” after editing this Section.

**Section 09 8454**

**FIRE-RATED SOUND BARRIER MULLION TRIM CAP**

Specifier Notes: This section covers Mull-it-Over Products Fire-rated Sound Barrier Mullion Trim Cap System. Consult Mull-it-Over Products for assistance in editing this section for the specific application.

Mull-it-Over Fire-Rated Sound Barrier Mullion Trim Cap may contribute points toward LEED™ Certification. Consult Mull-it-Over Products for more information.

PART 1 GENERAL

1.01 SECTION INCLUDES

Specifier Note: Select aluminum system that mullion trim cap system will engage with.

1. Fire-rated sound barrier mullion trim cap system providing sound transmission control and fire rating at **[aluminum store front system.] [aluminum curtain wall system.]**

1.02 RELATED REQUIREMENTS

1. Section 07 8400 – Firestopping.
2. Section 07 9200 - Joint Sealants.
3. Section 08 4100 – Entrances and Storefronts.
4. Section 08 4400 – Curtain Wall and Glazed Assemblies.
5. Section 09 2116 – Gypsum Board Assemblies.
6. Section 09 2153 – Expandable Partition Gap Filler.
7. Section 09 8453 – Sound Barrier Mullion Trim Cap.

1.03 REFERENCE STANDARDS

1. ANSI/UL 2079 - Tests for Fire Resistance of Building Joint Systems.
2. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials; 2017.
3. ASTM E90 - Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss of Building Partitions and Elements; 2009 (Reapproved 2016).
4. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
5. IAS – The International Accreditation Services
6. ICC (IBC) - International Building Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
7. ISO 9001 – International Organization for Standardization (ISO) Quality Management Systems.
8. GA-600 - Fire Resistance and Sound Control Design Manual; 2021.
9. CAN/ULC-S115-11 – Fire Tests of Firestop Systems.

1.04 SUBMITTALS

1. See Section 01 3000 - Administrative Requirements for submittal procedures.
2. Product Data:
	1. Fire-rated sound barrier mullion trim cap system.
	2. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for fire-rated sound barrier mullion trim cap system.
3. Shop Drawings: Indicate special details associated with fire-rated acoustic sound barrier mullion trim cap system indicating:

Specifier Note: Select aluminum system type.

* 1. Dimensioned cross-section(s) where gypsum board terminatesat **[aluminum storefront system.] [aluminum curtain wall system.]**
	2. Finish.
1. Samples: For each exposed product and for each color specified.
2. Size: 6 inch (152 mm) fire-rated sound barrier mullion trim cap sample and 2 inch by 3-1/2 inch (51 mm x 89 mm)

Specifier Note: Select sample required for project.

1. Finish: **[Custom color paint sample.] [Anodized finish sample.]**
2. Product Test Reports: For each sound barrier mullion trim cap assembly, ASTM E90 tests performed by a qualified third-party testing agency.
3. Certification Documents: UL 2079/ULC S115 certification for joint system.
4. Warranty: Submit manufacturer warranty and ensure forms have been completed in Owner’s name and registered with manufacturer.

1.05 QUALITY ASSURANCE

1. Manufacturer Qualifications: Manufacturer of aluminum extrusions and anodizing shall be ISO-9001 certified.
2. Installer Qualifications: Company approved by manufacturer and trained to perform work of this section.
3. Testing Agency Qualifications: ASTM E 90 testing to be performed by laboratory accredited by IAS.

1.06 DELIVERY, STORAGE, AND HANDELING

1. Do not deliver fire-rated sound barrier mullion trim caps until spaces to receive them are clean, dry, and ready for installation.
2. Store fire-rated sound barrier mullion trim caps in original undamaged packaging inside well-ventilated area protected from weather, moisture, soiling, extreme temperatures, and humidity.

1.07 WARRANTY

1. See Section 01 7800 – Closeout Submittals, for additional warranty requirements.
2. Manufacturer's Warranty: Manufacturer agrees to repair or replace sound barrier mullion trim caps that fail in materials or workmanship within warranty period.
	1. Warranty Period: Ten years limited warranty from date of Substantial Completion.
	2. Limited warranty does not cover adjacent products or improper installation.

PART 2 PRODUCTS

2.01 MANUFACTURERS

1. Mull-it-Over Products; Sound Barrier Mullion Trim Cap System: www.mullitoverproducts.com

Specifier Note: Select only trim cap(s) with corresponding STC required for project. MCFR designation to be used on drawings to indicate location of required mullion cap when a project requires fire-rated and sound barrier systems.

1. MCFR-1 - 60 Classic Sound Barrier Mullion Trim Cap System with 1-hour fire rating.
2. MCFR-2 - 60 Classic Sound Barrier Mullion Trim Cap System with 2-hour fire rating.

Specifier Note: Make selection.

1. Substitutions: **[Not Permitted] [See Section 01 6000 – Product Requirements]**

2.02 SYSTEM DESCRIPTION

1. General: Provide fire-rated sound barrier mullion trim caps of design, basic profile, and materials indicated. Provide units with capability to accommodate variations and differential movement in adjacent surfaces.
2. Furnish units in lengths to allow for field trimming to required length to match variations in construction tolerances of adjacent systems.

2.03 PERFORMANCE REQUIREMENTS

* + - * 1. Sound Transmission:

Double-Sided Installations: STC 60.

* + - * 1. Fire Rating:

Standard Conditions: Assembly fire rating per ANSI/UL2079 and CAN/ULC S115.

Specifier Note: Select hour rating required for project.

UL Joint System No. WW-S-1039 for 1-hour assembly.

UL Joint System No. WW-S-1041 for 2-hour assembly

Unique or Non-Standard Conditions: Subject to review and engineered ruling by manufacturer.

* + - * 1. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes.

Mullion trim cap to be sized to accommodate thermal movement.

2.04 COMPONENTS

1. Aluminum Extrusions:
	1. Thickness: 0.125 inches.
	2. Profile: As selected and approved by Architect to allow solid attachment and fastening to the partition wall framing
2. Sound Absorbing Foam:
	1. Resistant to smoke, flame, and microbial growth.
	2. Fire Rating: ASTM E84 Class 1.
	3. Fungi Resistance: Zero rating per ASTM G21.
3. Compressible Foam:
	1. Between edge of extrusion and interior face of glass at aluminum mullion.

 Specifier Note: Select thickness. Standard is 1/2 inch.

* 1. Thickness: **[Standard 1/2 inch (12.7 mm).] [3/4 inch (19.1 mm).] [1 inch (25.4 mm).] [1-1/2” (38.1 mm).] [As required to accommodate mullion deflection.]**

Specifier Note: Select color.

* 1. Color: **[Light gray.] [Charcoal.]**
1. Intumescent Foam:
	1. Between sound absorbing materials and face of aluminum mullion.
	2. Thickness: 1.8 mm (5/64 inch) thick supported by 0.9 mm (1/32 inch) steel impaling clips.
2. Fasteners:
	1. Self-Tapping or appropriate threaded fastener. Provided by installing sub-contractor.
3. Snap Cover: Snap-on fastener cover.
	1. Finish to match mullion trim cap.
4. Acoustical Sound Sealant: Acrylic latex not exposed to view.
	1. Vertical sealant bead full height of mullion trim cap. One per side on double-sided installations. Provided by installing sub-contractor.

**2.05 FABRICATION**

1. Extrusions and generic profiles to be shipped in custom lengths as required to meet project requirements or shipped in standard incremental foot lengths and cut to exact length on jobsite.
	1. FINISHES

Specifier Note: Select the paragraph below to match the requirements of the project. Select color.

* 1. Class lI Natural Anodized Finish: AAMA 611 AA-M12C22A31 Clear anodic coating not less than 0.4 mils (0.010 mm) thick.
	2. Color Anodized Class Il Color Anodized Finish: AAMA 611 AA-M12C22A32 Integrally colored anodic coating not less than 0.4 mils (0.010 mm) thick.
		1. Color: \_\_\_\_\_\_\_\_\_\_\_\_
	3. Superior Performing Organic Coatings System: Manufacturer's standard multi-coat superior performing organic coatings system complying with AAMA 2605, including at least 70 percent polyvinylidene fluoride (PVDF) resin, and at least 80 percent of aluminum extrusion and panels surfaces having minimum total dry film thickness (DFT) of 1.2 mils, 0.0012 inch (0.030 mm).
		1. Color: \_\_\_\_\_\_\_\_\_\_\_\_\_

Specifier Note: Select aluminum system that mullion trim cap system will engage with.

* 1. Custom Paint Finish: Organic coatings system complying with AAMA 2605, including at least 70 percent polyvinylidene fluoride (PVDF) resin to match [aluminum store front system.] [aluminum curtain wall system.] [paint finish as determined by the Architect.]
		1. Color: \_\_\_\_\_\_\_\_\_\_\_\_

PART 3 EXECUTION

3.01 EXAMINATION

1. Verify that project conditions are appropriate for work of this section to commence.
2. Examine substrates and conditions for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

Specifier Note: Select system that the Sound Barrier Mullion Trim Cap interfaces with.

1. Examine walls and adjacent **[aluminum store front system] [aluminum curtain wall system]** for suitable conditions where fire-rated sound barrier mullion trim cap will be installed.
2. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 INSTALLATION

1. Measure and cut fire-rated sound barrier mullion trim cap to proper lengths.
2. Notch around horizontal mullions, sills, or other obstructions leaving appropriate gap for differential movement between fire-rated sound barrier mullion trim cap and obstruction.
3. Apply continuous bead of acoustical sound sealant to unexposed side of extruded aluminum surface in contact with gypsum board edge.
4. Place fire-rated sound barrier mullion trim cap on vertical surface of gypsum board partition wall and loosely install fasteners in top and bottom slotted holes of mullion trim cap.
5. Plumb mullion trim cap leaving recommended gap spacing between interior glass surface and mullion trim cap. Foam gasket to be in contact with glass.
6. Tighten top and bottom fasteners to secure mullion trim cap.
7. Install additional fasteners at 12 inches on center, minimum.
8. Install snap cover to conceal fasteners.
9. Apply color matched sealant at joints of dissimilar materials. (Sealant provided by building sealant sub-contractor.)

3.03 CLEANING

1. After work is complete in adjacent areas, clean exposed surfaces with suitable cleaner that will not harm or attack mullion trim cap finish.

3.04 PROTECTION

1. Protect fire-rated sound barrier mullion trim caps from damage during installation, general construction activities, and until turnover of structure.

END OF SECTION