**SECTION 09 7756**

**INTERIOR SURFACING (ARCHITECTURAL FUSIONS)**

This section includes editing notes to assist the user in editing the section to suit project requirements. These notes are included as hidden text, and can be revealed or hidden by one of the following methods:

Microsoft Word 2010: Display the FILE tab on the ribbon, click OPTIONS, then on left menu click on DISPLAY. Under ALWAYS SHOW THESE select or deselect HIDDEN TEXT.

Microsoft Word 2007: Click the OFFICE button, select WORD OPTIONS, select DISPLAY, then select or deselect the HIDDEN TEXT option.

Corel WordPerfect: From the pull-down menus select VIEW, then select or deselect the HIDDEN TEXT option.

This master specification section has been prepared by Surfacequest, Inc. for use in the preparation of a project specification section covering architectural fusions interior surfacing.

SYSTEM PARAMETERS

The architectural fusions system involves key components:

Specialized surface finish architectural fusions.

Specialized substrate preparation.

Surface primers, sealers and preparation coatings.

Secondary adhesives as required depending on installation complexity.

Proprietary tools and installation techniques.

The application of the architectural fusions without the additional key components in the system will lead to significantly diminished product durability and possible failure.

Substrate: The architectural fusions must be applied to a proper, non-porous substrate. Applicable substrates are pressure laminates, melamine surfaces, wood or metal doors, bare and painted metals, plastics, polished stone finishes, and other hard surface non-porous products.

Alternative Substrates:

Properly applied (Class 5), primed and sealed gypsum finishes may be acceptable substrates in certain situations. Failure to match product application to substrate may result in poor finish quality or diminished product life. Architectural fusions applied to gypsum board substrates cannot be field repaired.

MDF surfaces and raw wood that are sealed properly may be acceptable substrates.

COMPONENTS SUPPLIED BY OTHERS

The architectural fusions finish system is designed for application to existing substrates, renovation elements such as doors, cabinetry or other existing substrates.

The application must be made to surfaces that are non-porous, smooth and free of defects, such as edge-banded melamine board.

Substrates and/or panels must be installed in such a manner as to maintain surface integrity, such as by adhesive or Z-clip installation.

Seams or joints on the substrate must be minimized, but if joints are necessary, they must be made tight and flush and sealed so that the flexible finish product may be overlaid without the substrate joint being noticeable.

Consult with certified architectural fusions installer for specifics on substrate preparation.

Architectural fusions applied to some substrates may be field repaired by a certified installer using approved repair methods.

The following should be noted in using this specification:

Hypertext links to specific websites are included after manufacturer names and names of organizations whose standards are referenced within the text, to assist in product selection and further research. Hypertext links are contained in parenthesis and shown in blue, e.g.:

[(www.astm.com](http://Www.astm.com) )

Optional text requiring a selection by the user is enclosed within brackets, e.g.: "Section [09 0000.] [\_\_\_\_\_.]"

Items requiring user input are enclosed within brackets, e.g.: "Section [\_\_\_\_\_ - \_\_\_\_\_\_\_\_]."

Optional paragraphs are separated by an "OR" statement, e.g.:

\*\*\*\* OR \*\*\*\*

Sustainable requirements are included for projects requiring LEED certification, and are included as green text. For additional information on LEED, visit the U.S. Green Building Council website at [www.usgbc.org](http://www.usgbc.org).

For assistance on the use of the products in this section, contact Surfacequest by calling 952-835-2880, by email at info@surfacequest.com, or visit their website at [www.surfacequest.com](http://www.surfacequest.com).

1. **GENERAL**
	1. SUMMARY

Edit the following paragraphs to include only those items specified in this section.

* + 1. Section Includes:
			1. Architectural fusions interior surfacing for [walls] [ceilings] [columns] [soffits] [doors] [cabinets] [millwork] [casework] [paneling] [elevator doors] [elevator cabs] [\_\_\_\_\_] applied to [gypsum board] [melamine] [wood] [medium density fiberboard] [PVC foam board] [\_\_\_\_] surfaces.

Coordinate the following paragraphs with other sections in the project manual.

* + 1. Related Sections:
			1. Division 01: Administrative, procedural, and temporary work requirements.
			2. Section [06 2000 - Finish Carpentry] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Millwork to receive surfacing.
			3. Section [06 4100 - Architectural Wood Casework] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Cabinets to receive surfacing.
			4. Section [08 1113 - Hollow Metal Doors and Frames] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Steel doors to receive surfacing.
			5. Section [08 1416 - Flush Wood Doors] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Wood doors to receive surfacing.
			6. Section [09 2900 - Gypsum Board] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: [Walls] [ceilings] columns] soffits] [\_\_\_\_] to receive surfacing.
			7. Section [12 3100 - Manufactured Metal Casework] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Metal casework to receive surfacing.
			8. Section [12 3200 - Manufactured Wood Casework] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Wood casework to receive surfacing.
			9. Section [14 2100 - Electric Traction Elevators] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Elevator doors and cabs to receive surfacing.
			10. Section [14 200 - Hydraulic Elevators] [\_\_ \_\_\_\_ - \_\_\_\_\_\_]: Elevator doors and cabs to receive surfacing.
	1. REFERENCES

In the following paragraphs, retain only those reference standards that are used elsewhere in this section.

* + 1. ASTM International (ASTM) [(www.astm.com](http://www.astm.com)) E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
		2. Underwriters Laboratories, Inc. (UL) [(www.ul.com](http://www.ul.com)):
			1. 723 - Test for Surface Burning Characteristics of Building Materials.
			2. 10B - Standard for Fire Tests of Door Assemblies.
			3. 10C - Standard for Positive Pressure Fire Tests of Door Assemblies.
	1. SUBMITTALS

Limiting submittals to only those actually required helps to minimize liability arising from the review of submittals. Minimize submittals on smaller, less complex projects.

Include the following for submission of shop drawings, product data, and samples for the Architect's review.

* + 1. Submittals for Review:
			1. Product Data: Manufacturer’s descriptive data for architectural fusions surfacing and accessories.
			2. Samples: [8 x 10] [\_\_ x \_\_] inch architectural fusions surfacing samples showing specified color and finish.
			3. Warranties: Sample warranty form.

Include the following for submission of quality control submittals. These submittals are intended for the Owner's record purposes and are not intended to be reviewed by the Architect.

* + 1. Quality Control Submittals:
			1. Certificates of Compliance: Certification that architectural fusions surfacing meets specified fire hazard classification requirements.

Include the following for submission of sustainable design submittals.

Architectural fusions interior surfacing may assist in obtaining other LEED points depending on their use. For example, maintaining existing interior walls, which are subsequently covered with architectural fusions interior surfacing, could result in obtaining points for Building Reuse.

Include the following for submission of closeout submittals for the Owner's record purposes.

* + 1. Closeout Submittals:
			1. Maintenance Data: Include maintenance data for installed products, including recommended and harmful cleaning materials and methods.
	1. QUALITY ASSURANCE
		1. Installer Qualifications: Certified architectural fusions installer.

Include the following for full size mockups for review of construction and coordination of work of several sections, if needed.

* + 1. Mockup:
			1. Size: Minimum [8 x 8] [\_\_ x \_\_] feet.
			2. Include: Architectural fusions surfacing and accessories. Include one seam.
			3. Locate [where directed.] [\_\_\_\_.]
			4. Approved mockup may [not] remain as part of the Work.

Include the following for a pre-installation conference attended by the parties performing the work of this section, if needed.

* + 1. Pre-Installation Conference:
			1. Convene at site immediately prior to beginning work of this Section.
			2. Attendance: Architect, [Contractor,] [Construction Manager,] [Design/Builder,] architectural fusions surfacing certified installer, and related trades.
			3. Review and discuss:
				1. Product delivery and storage, substrate requirements, installation schedule, and protection for completed work.
				2. For gypsum board substrates, review types of seams to be used.
	1. DELIVERY, STORAGE AND HANDLING
		1. Protect architectural fusions surfacing from weather, temperature, and harmful conditions as recommended by manufacturer.
		2. Store architectural fusions surfacing in original plastic bags and boxes, at temperature between 40 and 95 degrees F and relative humidity below 80 percent.
		3. Do not stack boxes over six units high.
		4. Do not use materials beyond one year shelf life.
	2. PROJECT CONDITIONS
		1. Do not install architectural fusions surfacing at temperatures below 50 degrees F or above 95 degrees F.
	3. WARRANTIES

Surfacequest will not issue a warranty for any project unless an installer certified by Surfacequest is used, Contact Surfacequest for a current listing of approved installers.

* + 1. Furnish architectural fusions surfacing material manufacturer’s and distributor’s 3 year warranty providing coverage for material and workmanship defects and specifically for: Reduced gloss, developed texture, decomposition, swelling, clouding, tackiness, crazing, bubbling, and cracking of architectural fusions surfacing.
1. **PRODUCTS**
	1. MANUFACTURERS
		1. Contract Documents are based on products by one or more of following manufacturers:
			1. Belbien by CI Kasei.
			2. LG.
			3. Reatec by Koroseal.
		2. Distributor: Surfacequest, Inc., 7760 France Avenue, Suite 1050, Bloomington, MN 55435, 952-835-2880, [www.surfacequest.com](http://www.surfacequest.com).

Edit the following to indicate whether or not substitutions will be permitted for the products in this section.

* + 1. Substitutions: [Under provisions of Division 01.] [Not permitted.]
	1. MATERIALS
		1. Architectural Fusions Interior Surfacing:
			1. Description:
				1. Architectural overlay with pressure sensitive adhesive backing.
				2. Precision manufactured from blend of synthetic, engineered plastics, produced using calendaring process. and printed using high-definition presses.
				3. Thickness: Maximum 6 mils without adhesive layer, 8.5 mils with adhesive layer.
			2. Fire hazard classification: Class A, tested to ASTM E84 and UL 723.

Include the following for architectural fusions surfacing applied to fire-rated doors.

* + - 1. Fire door overlays: Meet UL 10B and 10C.

Contact Surfacequest for available products and patterns.

* + - 1. Pattern: [\_\_\_\_.]
	1. ACCESSORIES

Include the following two paragraphs for gypsum board substrates. It may be helpful to tint the primer to match the fusion pattern color, but this is optional.

* + 1. Gypsum Board Primer: White acrylic type; may be tinted to match fusion pattern color.

In the following paragraph the best choice for a sealer is one coat of semi-gloss paint.

* + 1. Gypsum Board Sealer: Semi-gloss paint.

Include the following for medium density fiberboard and raw wood substrates. The best choice for a primer is an oil based, low-luster polyurethane, however, this product is not allowed in all locations due to VOC restrictions. Second choice is an acrylic, low-luster polyurethane.

* + 1. [Medium Density Fiberboard] [and] [Raw Wood] Sealer: [Oil based, low-luster polyurethane type.] [Acrylic, low-luster polyurethane type; Stays Clear by Benjamin Moore or approved substitute.]
1. **EXECUTION**
	1. EXAMINATION
		1. Ensure that substrates are:
			1. Nonporous and smooth.
			2. Free from gaps and overlaps.
			3. Smooth, free from wrinkles and bubbles.

Include the following for gypsum board substrates.

* + 1. Gypsum Board Substrates; ensure that:
			1. Surfaces have Level 5 finish.
			2. Outside corners have crisp, sharp edges.

Include the following for medium density fiberboard substrates.

* + 1. Medium Density Fiberboard Substrates; ensure that:
			1. Corners are mitered.
			2. Fasteners are counter sunk 1/8 inch below finished surface.
			3. Joints and seams are flush.

Include the following for melamine substrates. Melamine is the preferred substrate to receive surfacing.

* + 1. Melamine Substrates; ensure that:
			1. Corners are mitered.
			2. Fasteners are counter sunk 1/8 inch below finished surface.
			3. Joints and seams are flush.
			4. Raw edges are edge banded.
	1. PREPARATION
		1. Comply with manufacturer’s instructions for surface preparation.
		2. Coordinate substrate requirements with certified installer.
		3. Clean substrate; remove substances that could impair overlay bond, including mold, mildew, oil, grease, incompatible primers, and dirt.
		4. Finish sand surfaces to achieve proper adhesive bond surface. Re-clean surfaces after any sanding is complete. Apply proper surface sealer, primer, or secondary adhesive as required by substrate complexity. Protect prepared surface from contamination until application.

Include the following for gypsum board substrates.

* + 1. Gypsum Board Substrate:
			1. Wipe surfaces clean; remove dust and loose matter. Must be done prior to priming and painting.
			2. Apply one coat of an acrylic gypsum board primer and allow to dry.
			3. Sand surfaces to smooth, consistent surface.
			4. Wipe primed surfaces clean; remove dust and loose matter.
			5. Apply one coat of semi-gloss paint, being careful to minimize any streaks or lines. Use a ¼” fine nap roller to obtain a smooth, consistent surface.
			6. Allow paint to cure for 48 hours for best results.
			7. Do not use topping compound.

Include the following for medium density fiberboard substrates.

* + 1. Medium Density Fiberboard and Raw Wood Substrates:
			1. Wipe surfaces clean; remove dust and loose matter.
			2. Apply one thick coat of low luster polyurethane sealer without lines and streaks; allow to dry.
			3. Sand surfaces to smooth, consistent surface.
			4. Wipe surfaces clean; remove dust and loose matter.
			5. Apply second coat of low luster polyurethane without lines and streaks; allow to dry. Sand surfaces to smooth, consistent surface.
			6. Wipe surfaces clean; remove dust and loose matter.

Include the following for melamine and PVC Foam Board substrates. Melamine is the preferred substrate to receive surfacing.

* + 1. Melamine and PVC Foam Board Substrates: Wipe surfaces clean; remove dust and loose matter.

Include the following for existing doors.

* + 1. Existing Doors: Remove existing hardware, tag and save for reinstallation.
		2. Prepare other non-porous substrates to smooth, dry, clean surface, free of flaking, unsound coatings, cracks, and defects.
	1. INSTALLATION
		1. Install architectural fusions surfacing using a certified installer in accordance with manufacturer’s instructions.
		2. Install architectural fusions surfacing without gaps.
		3. Install on Gypsum Board, overlap seams are required.
		4. If using PVC Foam Board to create panels, a reveal of at least ¼” is preferred between panels. Paint or architectural fusions can be applied directly to the substrate in the reveal area.

Include the following for three-dimensional components such as rounded, arched, beveled, stepped forms.

* + 1. For three-dimensional components, heat product to mold to substrate so that pattern has continuous, realistic, even appearance.
		2. Remove air bubbles, wrinkles, blisters, and other defects.
	1. CLEANING
		1. Consult with certified installer for specific cleaning requirements based on finish, substrate, and applicable environment.
		2. Clean completed surfaces in accordance with manufacturer’s instructions.
		3. Do not use caustic, acidic, or abrasive cleaners.
	2. PROTECTION
		1. Protect completed surfaces from damage using temporary nonstaining coverings recommended by surfacing manufacturer.
	3. REPAIR

Architectural fusions applied to gypsum board substrates cannot be field repaired.

* + 1. Utilize certified installer to repair damaged architectural fusions using materials and procedures approved by architectural fusions manufacturer.

END OF SECTION