1. Section 078300
Fireblocking
2. **TIPS:**
3. This document includes **Specifier/Editor Notes** in hidden text. To view non-printing notes, turn on Hidden Text display option.
4. Revise this Section by adding, changing, and deleting text to meet Project-specific requirements.
5. **DISCLAIMER:**
Information contained in this specification conforms to standard detail and product recommendations for the installation of the specified products as of the date of publication of this document and is presented in good faith. Tenmat, Inc. and its affiliates assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. Visit our website at www.tenmatusa.com for the most current information.
	1. PART 1 GENERAL
		1. SECTION INCLUDES
			1. Intumescent cavity fireblocking.
			2. Accessories.
		2. RELATED REQUIREMENTS
			1. Section 078123 - Intumescent Fireproofing.
		3. REFERENCE STANDARDS
			1. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
			2. ASTM E2923 - Standard Practice for Longevity Assessment of Firestop Materials Using Differential Scanning Calorimetry.
			3. IEC 61249-2-21 - Materials for printed boards and other interconnecting structures - Part 2-21: Reinforced base materials, clad and unclad - Non-halogenated epoxide woven E-glass reinforced laminated sheets of defined flammability (vertical burning test), copper-clad.
			4. BS EN 1363-1 - Fire Resistance Tests.
		4. SUBMITTALS
			1. See Section 013000 - Administrative Requirements for submittals procedures.
			2. Product Data: Manufacturer's data sheets on each product and accessory to be used.
			3. Manufacturer's Installation Instructions:  Indicate preparation and installation instructions.
			4. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.
			5. General Acceptance Letter from the OTCR in New York City.
			6. Manufacturer's qualification statement.
			7. Installer's qualification statement.
		5. QUALITY ASSURANCE
			1. Manufacturer Qualifications: Company that specializes in manufacturing intumescent cavity fireblocking, with minimum five years of documented experience.
			2. Installer Qualifications: Company specializing in installation of exterior wall systems with at least five years of documented experience and having successfully completed manufacturer's required training.
		6. DELIVERY, STORAGE, AND HANDLING
			1. Deliver materials in manufacturer’s original, unopened containers with identification labels intact and legible.
			2. Store products in manufacturer's unopened packaging until ready for installation.
			3. Store at temperatures recommended by manufacturer in dry, protected area.
	2. PART 2 PRODUCTS
		1. MANUFACTURERS
			1. Basis of Design Product:
				1. Tenmat, Inc.; FF102/50: www.tenmatusa.com.

500 Water Street, Newport, DE 19804; (800) 821-3436.

* + - * 1. Substitutions: ​Not permitted​.
		1. SYSTEM REQUIREMENTS

Refer to IBC 2024 Section 718.2.6 for fireblocking code requirements.

* + - 1. Provide intumescent cavity fireblocking system acceptable to authorities having jurisdiction (AHJ).
			2. Comply with execution requirements of authority having jurisdiction (AHJ).
		1. MATERIALS
			1. Intumescent Cavity Fireblocking:  High-expansion, rigid intumescent material designed to close external wall cavities and prevent vertical flame spread.
				1. Surface Burning Characteristics:  Flame Spread Index (FSI) of 0 and Smoke Developed Index (SDI) of 0, when tested in accordance with ASTM E84.
				2. Longevity: Tested for 30 and 60 year equivalent exposure in accordance with ASTM E2923.
				3. Halogen Content: Halogen-free in accordance with IEC 61249-2-21.
				4. Size:  39 inches long by 3 inches wide by 1/4 inch thick (1 m long by 75 mm wide by 6 mm thick).
				5. Fire Rating:  Two hours when tested in accordance with BS EN 1363-1 following ASFPTGD 19 guidance.
		2. ACCESSORIES
			1. Fasteners: Manufacturer's recommended stainless steel screws or nails having a minimum head diameter of 1/4 inch (6 mm) and maximum head diameter of 1/2 inch (13 mm).
	1. PART 3  EXECUTION
		1. EXAMINATION
			1. Examine substrates to determine if they are in satisfactory condition to receive intumescent cavity fireblocking; verify that substrates are clean and free of cracks, surface imperfections, dust, oil, corrosive materials, and surface degredation.
			2. Do not begin installation until substrates have been properly prepared.
			3. If substrate preparation is responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
		2. INSTALLATION
			1. Comply with manufacturer's written instructions.
			2. Maximum cavity depth shall not exceed 2 inches (50 mm).
			3. Fasten at a maximum spacing of 8 inches (250 mm) on center at manufacturer's recommended depth for each substrate. Tighten fasteners until head is just touching the intumescent cavity fireblocking product. Do not overtighten.
			4. Do not penetrate intumescent cavity fireblocking with fasteners besides those used to fix the product to the building.

Consider combustibility, melting points, and shapes of any brackets, rails, or battens that may interrupt intumescent cavity barrier. Contact manufacturer for testing of various types of battens and products.

* + - 1. To the greatest extent possible, apply intumescent cavity fireblocking in an uninterrupted continuous line.
			2. Ensure sections of cavity fireblocking are tightly butted against each other and to any obstructions and are securely fastened.
			3. At interruptions in intumescent cavity fireblocking where fire could pass vertically, install approved firestop systems using applicable firestop products. See Section 078400 - Firestopping.
			4. Contact manufacturer regarding conditions which may impede the ability of the intumescent cavity fireblocking to perform as expected.
		1. FIELD QUALITY CONTROL

Special Inspections may be required by the AHJ. Retain Field Quality Control requirements as needed for each jurisdiction.

* + - 1. Independent Testing and Inspection Agency: Inspection agency, employed and paid by Owner, will examine fireblocking in accordance with the requirements of authorities having jurisdiction (AHJ).
			2. Repair or replace fireblocking at locations where inspection results indicate fireblocking does not meet specified requirements.
		1. PROTECTION
			1. Protect installed materials from damage due to subsequent construction activities.
			2. Replace damaged products before Date of Substantial Completion.
1. END OF SECTION