SECTION 07462

SIDING

\*\* NOTE TO SPECIFIER \*\* James Hardie Building Products, Inc.; siding panels and building boards. . This section is based on the products of James Hardie Building Products, Inc., which is located at:
26300 La Alameda Suite 400
Mission Viejo, CA 92691
Toll Free Tel: 866-274-3464
Tel: 949-367-4980
Fax: 949-367-4981
Email: [request info (info@jameshardie.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=James+Hardie+Building+Products,+Inc.&coid=33418&rep=&fax=949-367-4981&message=RE:%20Spec%20Question%20(07462jhi):%20%20&mf=)
Web: www.jameshardiecommercial.com
[ [Click Here](http://www.arcat.com/arcatcos/cos33/arc33418.html) ] for additional information.

We have operations in the United States, Australia, New Zealand, Asia, and Europe. No matter where we operate, our goal is to remain at the forefront of the fiber-cement industry, capitalizing on our global leadership in building products and manufacturing and technology for both new home construction and remodeling.

At James Hardie, we create innovative products that increase the beauty, value, safety and durability of the buildings you design. Explore increased design options through our wide variety of product colors and textures, and enjoy superior performance that allows your designs to last a lifetime.

 Siding Products
 James Hardie Building Products, Inc. ArtisanÆ Lap.
 Use architectural-grade ArtisanÆ Lap and the difference is plain to see. Utilizing the thickest material on the market-Artisan Lap creates deeply defined shadow lines which are both aesthetically pleasing and structurally integrated. Our unique tongue-and-groove design means tighter tolerances for a precise fit and finish.

 James Hardie Building Products, Inc. HardiePlankô Lap Siding.
HardiePlankô lap siding offers the beauty and traditional look of wood lap siding while providing very non-wood-like benefits: low maintenance and an unmatched resistance to weather damage in wet and humid climates while retaining its natural beauty. Our proprietary ColorPlusÆ Technology combines a professionally developed 26-color paint palette optimally formulated for use with fiber cement. The multi-coat, baked-on factory application process delivers a strikingly beautiful and consistent finished product.

 James Hardie Building Products, Inc. HardieShingleô Siding.
HardieShingleô siding has the same warm, authentic look as cedar shingles, yet it doesn't rot, crack or split. It's beautiful as a primary siding or as a complement to other styles of James HardieÆ siding. Our shingle siding panels come in a variety of decorative edges, and expedite installation in larger areas. Ideal for smaller coverage areas, HardieShingle individual shingles come in a variety of widths for an authentic handcrafted look.

 James Hardie Building Products, Inc. HardiePanelô Vertical Siding.
HardiePanelô siding products offer protection from fire, weather, and insects. Use our recommended metal edging to create sharp, expressed seams that result in a visually stunning exterior surface that's as low-maintenance and low-cost as it is high-quality. Residential vertical siding is also available in wood grain and stucco patterns.

Trim:
The perfect accent for James Hardie's architectural grade ArtisanÆ Lap is architectural-grade Artisanô Accent Trim. With an impressive thickness of 1.5", it casts the same dramatically deep and defined shadows as the Artisan Lap it accompanies. Of course, it also offers the same durability, low maintenance and ease of installation.

 James Hardie Building Products, Inc. HardieTrimô Boards:
Our fiber cement trim and fascia add the finishing touch to a beautiful, lasting project. They provide unmatched durability in corners, columns, windows, rakes and friezes. HardieTrimô boards are pre-primed with PrimePlusÆ sealer and primer. This proprietary process for fiber cement trim ensures uniform coverage of sealer and primer, providing an excellent surface for paints. HardieTrim boards come with a 10-year transferable limited warranty.

 James Hardie Building Products, Inc. HardieSoffitô Panels:
 James Hardie pre-cut soffit panels eliminate the need for separate box or strip vents and minimize the need for cutting. HardieSoffitô panels are available vented or non-vented, in a range of pre-cut sizes. All styles are pre-primed with PrimePlusÆ sealer and primer. This proprietary process ensures uniform coverage of sealer and primer, providing an excellent surface for paints.

 James Hardie Building Products, 1nc. HardieBackerô 1/4 inch Cement Board, with EZ GridÆ Technology:
HardieBackerô 1/4 inch Cement Board, with EZ GridÆ Technology, for floors and countertops is America's best selling 1/4 inch board. It's the solution you can trust for your wet area floors, walls, ceilings, and countertops. This no-mesh board is the lightest cement board available and cuts easily, even in tight, awkward spaces.

 James Hardie Building Products, Inc. HardieBackerô 1/2 inch Cement Board
HardieBackerô 1/2 inch Cement Board for walls and floors delivers superior protection against moisture damage and mold growth. Its smooth surface may be painted, textured, wallpapered, or tiled.

Green and Sustainable:
 We support the entire building industry's efforts in creating materials that deliver more sustainable homes, neighborhoods and commercial buildings. Together, we hope to provide a better built environment that will endure years to come.

1. GENERAL
	1. SECTION INCLUDES

\*\* NOTE TO SPECIFIER \*\* Delete items below not required for project.

* + 1. Fiber cement lap siding, panels, shingle, trim, fascia, moulding and accessories; James Hardie HZ10 Engineered for Climate Siding.
		2. Factory-finished fiber cement lap siding, panels, shingle, trim, fascia, moulding and accessories; James Hardie HZ10 Engineered for Climate Siding.
	1. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 05400 - Light Gage Metal Framing: Wall framing and bracing.
		2. Section 06100 - Rough Carpentry: Wood framing and bracing.
		3. Section 06100 - Rough Carpentry: Sheathing.
		4. Section 07210 - Insulation: Exterior wall insulation.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. ASTM D3359 - Standard Test Method for Measuring Adhesion by Tape Test, Tool and Tape.
		2. ASTM E136 - Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 degrees C.
	1. SUBMITTALS
		1. Submit under provisions of Section 01300.
		2. Product Data: Manufacturer's data sheets on each product to be used, including:
			1. Preparation instructions and recommendations.
			2. Storage and handling requirements and recommendations.
			3. Installation methods.
		3. Shop Drawings: Provide detailed drawings of atypical non-standard applications of cementitious siding materials which are outside the scope of the standard details and specifications provided by the manufacturer.

\*\* NOTE TO SPECIFIER \*\* Delete selection samples if colors have already been selected.

* + 1. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
		2. Verification Samples: For each finish product specified, two samples, minimum size 4 by 6 inches (100 by 150 mm), representing actual product, color, and patterns.
	1. QUALITY ASSURANCE

\*\* NOTE TO SPECIFIER \*\* Add installer quality assurance provisions. Delete if not required.

* + 1. Installer Qualifications: Minimum of 2 years experience with installation of similar products.

\*\* NOTE TO SPECIFIER \*\* Include a mock-up if the project size and/or quality warrant taking such a precaution. The following is one example of how a mock-up on a large project might be specified. When deciding on the extent of the mock-up, consider all the major different types of work on the project.

* + 1. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
			1. Finish areas designated by Architect.
			2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
			3. Refinish mock-up area as required to produce acceptable work.
	1. DELIVERY, STORAGE, AND HANDLING
		1. Store products in manufacturer's unopened packaging until ready for installation.
		2. Store siding on edge or lay flat on a smooth level surface. Protect edges and corners from chipping. Store sheets under cover and keep dry prior to installing.
		3. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
	2. PROJECT CONDITIONS
		1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
	3. WARRANTY
		1. Product Warranty: Limited, non-pro-rated product warranty.
			1. HardiePlank HZ10 lap siding for 30 years.
			2. HardiPanel HZ10 vertical siding for 30 years.
		2. Finish Warranty: Limited product warranty against manufacturing finish defects.
			1. When used for its intended purpose, properly installed and maintained according to Hardie's published installation instructions, James Hardie's ColorPlus finish with ColorPlus Technology, for a period of 15 years from the date of purchase: will not peel; will not crack; and will not chip. Finish warranty includes the coverage for labor and material.

\*\* NOTE TO SPECIFIER \*\* Delete if workmanship warranty not required.

* + 1. Workmanship Warranty: Application limited warranty for 2 years.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: James Hardie Building Products, Inc., which is located at: 26300 La Alameda Suite 400 ; Mission Viejo, CA 92691; Toll Free Tel: 866-274-3464; Tel: 949-367-4980; Fax: 949-367-4981; Email: [request info (info@jameshardie.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=James+Hardie+Building+Products,+Inc.&coid=33418&rep=&fax=949-367-4981&message=RE:%20Spec%20Question%20(07462jhi):%20%20&mf=); Web: www.jameshardiecommercial.com

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for approval of equal substitutions will be considered in accordance with provisions of Section 01600.
	1. SIDING
		1. HardiPanel HZ10 vertical siding requirement for Materials:
			1. Fiber-cement Siding - complies with ≈STM C 1186 Type A Grade II.
			2. Fiber-cement Siding - complies with ≈STM E 136 as a noncombustible material.
			3. Fiber-cement Siding - complies with ASTM E 84 Flame Spread Index = 0, Smoke Developed Index = 5.
			4. CAL-FIRE, Fire Engineering Division Building Materials Listing - Wildland Urban Interface (WUI) Listed Product.
			5. National Evaluation Report No. NER 405 (BOCA, ICBO, SBCCI, IBC, IRC).
			6. City of Los Angeles, Research Report No. 24862.
			7. Miami Dade County, Florida Notice of Acceptance 07-0418.04.
			8. US Department of Housing and Urban Development Materials Release 1263d
			9. California DSA PA-019.
			10. City of New York M EA 223-93-M.
			11. Florida State Product Approval FL889.
			12. Texas Department of Insurance Product Evaluation EC-23.

\*\* NOTE TO SPECIFIER \*\* HardieSoffit vented soffit panel is not a CAL-FIRE, Fire Engineering Division Building Materials Listing - Wildland Urban Interface (WUI) Listed product.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* + 1. Vertical Siding: HardiePanel HZ10 siding as manufactured by James Hardie Building Products, Inc.
			1. Type: Smooth Vertical siding panel 4 feet by 10 feet (1219 mm by 3048 mm).
			2. Artisan HZ10 Accent trim as manufactured by James Hardy Building Products, Inc.

\*\* NOTE TO SPECIFIER \*\* Delete if not required.

* 1. FASTENERS

\*\* NOTE TO SPECIFIER \*\* Refer to applicable building code compliance reports for maximum basic wind speed for exposure category and/or applicable shear values and select one fastener, delete all that do not apply: \*\* NOTE TO SPECIFIER \*\* When fastening through maximum 1 inch thick foam insulation, increase the length of the fastener by the thickness of insulation.

* + 1. Wood Framing Fasteners:
			1. Wood Framing: 4d common corrosion resistant nails.
			2. Wood Framing: 6d common corrosion resistant nails.
			3. Wood Framing: 8d box ring common corrosion resistant nails.
			4. Wood Framing: 0.089 inch (2.2 mm) shank by 0.221 inch (5.6 mm) head by 2 inches (51 mm) corrosion resistant siding nails.
			5. Wood Framing: 0.093 inch (2.4 mm) shank by 0.222 inch (5.6 mm) head by 2 inches (51 mm) corrosion resistant siding nails.
			6. Wood Framing: 0.093 inch (2.4 mm) shank by 0.222 inch (5.6 mm) head by 2-1/2 inches (64 mm) corrosion resistant siding nails.
			7. Wood Framing: 0.091 inch (2.3 mm) shank by 0.221 inch (5.6 mm) head by 1-1/2 inches (38 mm) corrosion resistant siding nails.
			8. Wood Framing: 0.091 inch (2.3 mm) shank by 0.225 inch (5.7 mm) head by 1-1/2 inches (38 mm) corrosion resistant siding nails.
			9. Wood Framing: 0.121 inch (3 mm) shank by 0.371 inch (9.4 mm) head by 1-1/4 inches (32 mm) corrosion resistant roofing nails.
			10. Wood Framing: No. 11 gauge 1-1/4 inches (32 mm) corrosion resistant roofing nails.
			11. Wood Framing: No. 11 gauge 1-1/2 inches (38 mm) corrosion resistant roofing nails.
			12. Wood Framing: No. 11 gauge 1-3/4 inches (44 mm) corrosion resistant roofing nails.
		2. Metal Framing:
			1. Metal Framing: 1-1/4 inches (32 mm) No. 8-18 by 0.375 inch (9.5 mm) head self-drilling, corrosion resistant S-12 ribbed buglehead screws.
			2. Metal Framing: 1-5/8 inches (41 mm) No. 8-18 by 0.323 inch (8.2 mm) head self-drilling, corrosion resistant S-12 ribbed buglehead screws.
			3. Metal Framing: 1 inch (25 mm) No. 8-18 by 0.323 inch (8.2 mm) head self-drilling, corrosion resistant ribbed buglehead screws.
			4. Metal Framing: 1 inch (25 mm) No. 8-18 by 0.311 inch (7.9 mm) head self-drilling, corrosion resistant S-12 ribbed buglehead screws.
			5. Metal Framing: 1.5 inch (38mm) [AGS-100] .100 inches by 25 inches (2540 mm by 635 mm) ET&F Pin or equivalent pneumatic fastener.
		3. Masonry Walls:
			1. Masonry Walls: Aerico Stud Nail, ET&F ASM No.-144-125, 0.14 inch (3.6 mm) shank by 0.30 inch (7.6 mm) head by 2 inches (51 mm) long corrosion resistant nails.

\*\* NOTE TO SPECIFIER \*\* Certain geographic areas allow a minimum single coat of 100% acrylic or exterior grade latex, high quality alkali resistant paint on unprimed product. James Hardie recommends, minimum one coat primer plus on or two topcoats.

* 1. FlNlSHES

\*\* NOTE TO SPECIFIER \*\* Field painted option: Delete if not required.

\*\* NOTE TO SPECIFIER \*\* The use of oil based paints on unprimed fiber cement could result in increased surface roughness, loss of adhesion, cracking or excessive chalking. James Hardie does not recommend the use of oil based paints over unprimed fiber cement siding products. Stains containing linseed oil are specifically designed for wood and may not be suitable for fiber cement siding products, primed or unprimed.

\*\* NOTE TO SPECIFIER \*\* All of the siding and trim products (not including Artisan Lap Siding products) are available with a factory applied baked on paint finish. Delete if not required.

* + 1. Factory Finish: Refer to Exterior Finish Schedule.

\*\* NOTE TO SPECIFIER \*\* Delete colors not applicable as color availability varies by region, Refer to James Hardie Color Plus website (<http://www.jameshardiecolorplus.com>) to check which colors are available for your project.

* + - 1. Product: ColorPlus Technology by James Hardie.
			2. Definition: Factory applied finish; defined as a finish applied in the same facility and company that manufactures the siding substrate.
			3. Process:
				1. Factory applied finish by fiber cement manufacturer in a controlled environment within the fiber cement manufacturer's own facility utilizing a multi-coat, heat cured finish within one manufacturing process.
				2. Each finish color must have documented color match to delta E of 0.5 or better between product lines, manufacturing lots or production runs as measured by photospectrometer and verified by third party.
			4. Protection: Factory applied finish protection such as plastic laminate that is removed once siding is installed
			5. Accessories: Complete finishing system includes pre-packaged touch-up kit provided by fiber cement manufacturer. Provide quantities as recommended by manufacturer.

Note: Product to be field painted.

\*\* NOTE TO SPECIFIER \*\* All of the siding and trim products (not including Artisan Lap Siding products) are available with a factory applied baked on paint finish. Delete if not required.

1. EXECUTION
	1. EXAMINATION
		1. Do not begin installation until substrates have been properly prepared.
		2. If framing preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

\*\* NOTE TO SPECIFIER \*\* Wood framing provisions. Delete if not required.

* + 1. Nominal 2 inch by 4 inch (51 m by 102 mm) wood framing selected for minimal shrinkage and complying with local building codes, including the use of water-resistive barriers or vapor barriers where required. Minimum 1-1/2 inches (38 mm) face and straight, true, of uniform dimensions and properly aligned.
			1. Install water-resistive barriers and claddings to dry surfaces.
			2. Repair any punctures or tears in the water-resistive barrier prior to the installation of the siding.
			3. Protect siding from other trades.

\*\* NOTE TO SPECIFIER \*\* Metal framing provisions. Delete if not required.

* + 1. Minimum 20 gauge 3-5/8 inch (92 mm) C-Stud 16 inches maximum on center or 16 gauge 3-5/8 inches (92 mm) C-Stud 24 inches (610 mm) maximum on center metal framing complying with local building codes, including the use of water-resistive barriers and/or vapor barriers where required. Minimum 1-1/2 inches (38 mm) face and straight, true, of uniform dimensions and properly aligned.
			1. Install water-resistive barriers and claddings to dry surfaces.
			2. Repair any punctures or tears in the water-resistive barrier prior to the installation of the siding.
			3. Protect siding from other trades.
	1. PREPARATION
		1. Clean surfaces thoroughly prior to installation.
		2. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
		3. Install a water-resistive barrier.
		4. The water-resistive barrier must be appropriately installed with penetration and junction flashing in accordance with local building code requirements.
		5. Install and HardieWrapTM flashing, HardieWrapTM Flex Flashing.
	2. INSTALLATION - HARDIEPANEL HZ10 VERTICAL SIDING

\*\* NOTE TO SPECIFIER \*\* Local building code may permit the use of "water-repellent panel sheathing" instead of a "building paper type" water-resistive barrier. However, the manufacturer recommends the use of a "building paper type" water-resistive barrier in all siding applications. A vapor barrier may also be required.

* + 1. Install materials in strict accordance with manufacturer's installation instructions.
		2. Block framing between studs where HardiePanel siding horizontal joints occur.
		3. Install metal Z flashing and provide a 1/4 inch (6 mm) gap at horizontal panel joints.
		4. Place fasteners no closer than 3/8 inch (9.5 mm) from panel edges and 2 inches (51 mm) from panel corners.
		5. Allow minimum vertical clearance between the edge of siding and any other material in strict accordance with the manufacturer's installation instructions.
		6. Maintain clearance between siding and adjacent finished grade.
		7. Specific framing and fastener requirements refer to Tables 2 and 3 in National Evaluation Service Report No. NER-405.
		8. Factory Finish Touch Up: Apply touch up paint to cut edges in accordance with manufacturer's printed instructions.
			1. Touch-up nicks, scrapes, and nail heads in pre-finished siding using the manufacturer's touch-up kit pen.
			2. Touch-up of nails shall be performed after application, but before plastic protection wrap is removed to prevent spotting of touch-up finish.
			3. Use touch-up paint sparingly. If large areas require touch-up, replace the damaged area with new pre-finished siding. Match touch up color to siding color through use of manufacturer's branded touch-up kits.

\*\* NOTE TO SPECIFIER \*\* All of the siding and trim products (not including Artisan Lap products) are available with a factory applied baked on paint finish. Delete if field finishing not required.

* 1. FINISHING

\*\* NOTE TO SPECIFIER \*\* Certain geographic areas allow minimum shingle coat of 100 percent acrylic or latex exterior grade, high quality alkali resistant paint on unprimed product. James Hardie recommends minimum one coat primer plus one topcoat, or two topcoats for best results. Delete finish not required.

* + 1. Finish unprimed siding with a minimum one coat high quality, alkali resistant primer and one coat of either, 100 percent acrylic or latex or oil based, exterior grade topcoats or two coats high quality alkali resistant 100 percent acrylic or latex, exterior grade topcoat within 90 days of installation. Follow paint manufacturer's written product recommendation and written application instructions.
		2. Finish factory primed siding with a minimum of one coat of high quality 100 percent acrylic or latex or oil based exterior grade paint within 180 days of installation. Follow paint manufacturer's written product recommendation and written application instructions.
	1. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION