



**Specifier General Notes:**

***This Formica Corporation guide specification covers the product line of FENIX® materials for interior applications.***

***The purpose of this guide specification is to provide a material specification section for any given project to be included in the project manual or sheet specification. This too could serve as text to "drop-into" laminated related specification sections.***

***FENIX® materials support conservation, green design and building practices and may contribute toward many sustainability initiatives including LEED (Leadership in Energy and Environmental Design) building certifications.***

***Consult [www.fenixforinteriors-na.com](http://www.fenixforinteriors-na.com) for assistance in using this guide specification for additional information not included, such as recommended substrates, the latest colors, fabrication methods and project applications. Formica Corporation is the manufacturer/supplier of the product. It is the responsibility of the user to determine if the product fits for the specific application.***

***Updated: June 2020.***

**SECTION 06 05 13 – DECORATIVE PLASTIC LAMINATE**

**PART 1 - GENERAL**

**1.1 SUMMARY**

A. Section Includes the following materials:

***Specifier Note:  
Select all that apply***

1. [FENIX NTM® .8mm Standard Core.]
2. [FENIX NTM® 1.2mm Colored Core.]
3. [FENIX NTM® 12mm Colored Core.]

B. Related Requirements:

***Specifier Note:  
Select all that apply***

1. [Division 06 Interior Finish Carpentry.]
2. [Division 06 Plastic-Laminate-Faced Architectural Cabinets.]



3. [Division 06 Plastic-Laminate-Faced Wood Paneling.]
4. [Division 06 Interior Architectural Woodwork.]
5. [Division 08 Plastic-Laminate-Faced Wood Doors.]
6. [Division 08 Flush Wood Doors.]
7. [Division 10 Plastic-Laminate-Clad Toilet Compartments.]
8. [Division 12 Manufactured Plastic-Laminate-Faced Casework.]
9. [Division 12 Residential Casework.]
10. [Division 12 Plastic-Laminate Laboratory Casework.]
11. [Division 12 Plastic-Laminate-Clad Countertops.]
12. [Division 12 Plastic-Laminate-Clad Case Goods.]

## 1.2 REFERENCES

- A. Reference Standards: In addition to requirements, comply with applicable provisions of following for design, materials, fabrication, and installation of component parts:
1. EN438-2:2016 + A1:2019: High Pressure Decorative Laminates (HPL) – Sheets based on thermosetting resins (usually called laminates) – Part 2: Determination of properties
  2. ASTM E 84: Standard Test Method for Surface Burning Characteristics of Building Materials.

**Specifier Note:**  
**Select all that apply**

3. [FSC: Forest Stewardship Council.]
4. [IMO FTP: International Code for Application of Fire Test Procedures.]
5. [IMO FTP Code Part 2: Smoke and Density Test.]
6. [IMO FTP Code Part 5: Test for Surface Flammability.]
7. [ISO 9001: Quality Management Systems.]
8. [LEED: Leadership in Energy and Environmental Design.]
9. [NSF 35: High Pressure Decorative Laminates for Surfacing Food Service Equipment.]
10. [Architectural Woodwork Quality Standards.]
11. [SEFA 8.1.]

## 1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.



***Specifier Note:***

***Retain following article / paragraphs if required for any sustainable requirements. Add additional sustainable requirements not listed. Check also manufacturer's website for current information.***

#### **1.4 ACTION SUBMITTALS**

- A. Product Data:
  - 1. Product data for each specified product. Include manufacturer's technical data sheets and published installation instructions.
- B. Shop Drawings: Each installation.
  - 1. Anchorages to other construction, including requirements for concealed supports.
  - 2. Use same unit designations used on Drawings.
- C. Samples for Selection:
  - 1. Available standard framing finish colors.
- D. Verification Samples: 12-inch length of typical framing member in specified finish.
  - 1. FENIX NTM<sup>®</sup>-clad panels, not less than 8 by 10 inches (200 by 250 mm), for each type, color, pattern, and surface finish[, with separate samples of unfaced panel product used for core].

#### **1.5 INFORMATIONAL SUBMITTALS**

- A. Qualification Data: For fabricator and installer.
- B. Product Certificates: For the following:
  - 1. FENIX NTM<sup>®</sup> material.
  - 2. Adhesives.

***Specifier Note:***

***Retain following article / paragraphs if required for any sustainable requirements. Add additional sustainable requirements not listed. Check also manufacturer's website for current information.***



## **1.6 SUSTAINABLE DESIGN SUBMITTALS**

- A. General: Products in this section may also be required to comply with sustainability requirements described in Division 01 General Requirements including, but not limited to, the following:**
- 1. GREENGUARD Certification.**
  - 2. Carbon Reduction.**
  - 3. FSC Chain of Custody Certification.**
  - 4. TVOC (Total Volatile Organic Compounds).**
  - 5. Total Aldehydes.**
  - 6. Formaldehyde.**
  - 7. Life Cycle Analysis (LCA) or Durability.**
  - 8. Waste Management.**
- B. [LEED Rating System Requirements:**
- 1. Potential Credits for Plastic Laminates:**
    - a. MR Credit 5, Regional Materials.**
    - b. MR Credit 7, Certified Wood.**
    - c. IEQ Credit 4.5, Low-Emitting Materials.]**
  - 2. [Potential Credits for Adhesives:**
    - a. IEQ Credit 3.2, Construction Indoor Air Quality.**
    - b. IEQ Credit 4.1, Low Emitting Materials, Adhesives.**
    - c. IEQ Credit 4.4, Low Emitting Materials, Adhesives, Composite wood and Agrifiber products.**
    - d. IEQ Credit 4.5 Low Emitting Materials.]**
- C. Product Certificates: For materials manufactured within 500 miles (800 km) of Project, indicating location of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include distance to Project and cost for each raw material.**
- D. Chain-of-Custody Certificates: For certified wood products. Include statement of costs.**
- E. Chain-of-Custody Qualification Data: For manufacturer and vendor.**
- F. Laboratory Test Reports: For adhesives, indicating compliance with requirements for low-emitting materials.**
- G. Laboratory test reports for IEQ 4.1 that indicate compliance with testing and product requirements of California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers."**



## 1.7 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Manufacturer's written maintenance instructions.
- B. Manufacturer warranties transferrable to Owner.

## 1.8 QUALITY ASSURANCE

- A. Installer Qualifications: Company specializing in fabricating and installing decorative plastic laminate finished work with a minimum 3 years experience.
- B. Fabricator Qualifications: Shop that employs skilled workers who custom fabricate products similar to those required for this Project and whose products have a record of successful in-service performance with a minimum 3 years experience.

***Specifier Note:***  
***If project size or complexity justifies cost for Mock-up(s) they can be specified here. Sample text below is for general projects that have full room mockups, such as hospital and hospitality projects.***

- C. Mock-Ups:
  - 1. Build mockups to verify selections made under submittals and to demonstrate aesthetic effects, set quality for materials and construction, set quality standard for fabrication and installation.
  - 2. Acceptable mock-ups may remain as part of the Work if undamaged at time of Substantial Completion.
  - 3. Acceptable mock-ups shall be comparison standard for remaining Work.

## 1.9 DELIVERY, STORAGE, AND HANDLING

- A. Package and ready materials according to manufacturer's instructions.
- B. Do not deliver components until Project is fully enclosed.
- C. Provide protective coverings of suitable material. Take special precautions at corners.
- D. Store sheets on a flat surface that provides full support and stacked one on top of the other.
- E. Sheets covered with protective film should be stored in a clean dry atmosphere at room temperature (ideally 68°F or 20 °C), avoiding exposure to atmospheric agents and UVA rays.



## **1.10 PROJECT CONDITIONS**

- A. Coordinate sizes and locations of cut-outs and other related Work specified in other Sections to ensure that interior laminate construction can be supported and installed as indicated.

## **PART 2 - PRODUCTS**

### **2.1 PERFORMANCE REQUIREMENTS**

- A. Fire-Test-Response Characteristics: Provide decorative plastic laminate with the following surface burning characteristics as determined by testing identical products per ASTM E 84 by UL or another testing and inspecting agency acceptable to authorities having jurisdiction:
  - 1. Flame-Spread Index: 25 or less.
  - 2. Smoke-Developed Index: 450 or less.
- B. Source Limitations: Obtain decorative plastic laminate materials through one source from a single manufacturer.

### **2.2 MANUFACTURER**

- A. Manufacturer:
  - 1. Basis of Design: Formica Corporation.
    - a. Fenixforinteriors-na.com
    - b. Contact: 1-800-367-6222

### **2.3 PLASTIC LAMINATE PRODUCTS**

#### **1) FENIX NTM<sup>®</sup> Standard Core**

- 1. Description:
  - a. FENIX NTM<sup>®</sup> is a material produced by simultaneous application of heat and pressure, in order to obtain a homogeneous non-porous high density product. The core structure is composed of paper, impregnated with thermosetting resins. The outer surface is made of paper substrate treated with next generation acrylic resins applied to the substrate as a multilayer coating and subsequently, cured via an electron beam process.
  - b. Laminate Limitations:
    - 1) Shall not be used in areas exposed to temperatures exceeding 275 degrees F (135 degrees C) or for exterior applications.
  - c. Laminate Substrate: Follow guidance given in manufacturers specific guidelines on laminate substrates to be used.



2. Laminate Grade:
  - a. Grade JL (HGS), 0.8 mm.
  - b. Grade JM (HGS), 0.8 mm.
3. Laminate Color(s):

***Specifier Note:***

***Select location of information or list the color selections for the project.***

- a. **[As indicated on Drawings.]**
  - b. **[Match Architect's samples.]**
  - c. **[As selected by Architect from manufacturer's line of available colors.]**
  - d. **[Laminate Color (include here if not on Drawings).]**
  - e. **[Laminate Color (include here if not on Drawings).]**
4. Laminate Finish: FN.
  5. Laminate Application(s): Horizontal and Vertical.

***Specifier Note:***

***Select application(s) for the project.***

- a. **[Interior Finish Carpentry.]**
- b. **[Plastic-Laminate-Faced Architectural Cabinets.]**
- c. **[Plastic-Laminate-Faced Wood Paneling.]**
- d. **[Interior Architectural Woodwork.]**
- e. **[Plastic-Laminate-Clad Toilet Compartments.]**
- f. **[Manufactured Plastic-Laminate-Faced Casework.]**
- g. **[Residential Casework.]**
- h. **[Plastic-Laminate Laboratory Casework.]**
- i. **[Plastic-Laminate-Clad Countertops.]**
- j. **[Plastic-Laminate-Clad Case Goods.]**

**B. FENIX NTM<sup>®</sup> 1.2mm Colored Core**

1. Description:
  - a. FENIX NTM<sup>®</sup> is a material produced by simultaneous application of heat and pressure, in order to obtain a homogeneous non-porous high density product. The core structure is composed of paper, impregnated with thermosetting resins. The outer surface is made of paper substrate treated with next generation acrylic resins applied to the substrate as a multilayer coating and subsequently, cured via an electron beam process. This material has a matching colored core.
  - b. Laminate Limitations: Follow Laminate Manufacturers guidelines in Technical guidance documents
  - c. Laminate Substrate: Follow guidance given in manufacturers specific guidelines on laminate substrates to be used.



- 1) Plywood, underlayment and solid lumber substrate not acceptable.
2. Laminate Grade: Grade JJ (HGS), 1.2 mm.
3. Laminate Color(s):

***Specifier Note:***

***Select location of information or list the color selections for the project.***

- a. [As indicated on Drawings.]
  - b. [Match Architect's samples.]
  - c. [As selected by Architect from manufacturer's line of available colors.]
  - d. [Laminate Color (include here if not on Drawings).]
  - e. [Laminate Color (include here if not on Drawings).]
4. Laminate Finish: FN.
  5. Laminate Application(s): Horizontal and Vertical.

***Specifier Note:***

***Select application(s) for the project.***

- a. [Interior Finish Carpentry.]
- b. [Plastic-Laminate-Faced Architectural Cabinets.]
- c. [Plastic-Laminate-Faced Wood Paneling.]
- d. [Interior Architectural Woodwork.]
- e. [Plastic-Laminate-Clad Toilet Compartments.]
- f. [Manufactured Plastic-Laminate-Faced Casework.]
- g. [Residential Casework.]
- h. [Plastic-Laminate Laboratory Casework.]
- i. [Plastic-Laminate-Clad Countertops.]
- j. [Plastic-Laminate-Clad Case Goods.]

C. FENIX NTM<sup>®</sup> 12.0mm Colored Core

1. Description:
  - a. FENIX NTM<sup>®</sup> is a material produced by simultaneous application of heat and pressure, in order to obtain a homogeneous non-porous high density product. The core structure is composed of paper, impregnated with thermosetting resins. The outer surface is made of paper substrate treated with next generation acrylic resins applied to the substrate as a multilayer coating and subsequently, cured via an electron beam process. This material has a matching colored core.
2. Laminate Grade:





**Specifier Note:**

**Select grade(s) for the project. Some grades may come in certain specific colors and sizes.**

- a. [Grade JK (CGS), 12.0 mm.]
  - b. [Grade JT (CGS), 12.0 mm).]
3. Laminate Color(s):

**Specifier Note:**

**Select location of information or list the color selections for the project.**

- a. [As indicated on Drawings.]
  - b. [Match Architect's samples.]
  - c. [As selected by Architect from manufacturer's line of available colors.]
  - d. [Laminate Color (include here if not on Drawings).]
  - e. [Laminate Color (include here if not on Drawings).]
4. Laminate Finishes: FN.
5. Laminate Application(s): Horizontal and Vertical.

**Specifier Note:**

**Select application(s) for the project.**

- a. [Interior Finish Carpentry.]
  - b. [Plastic-Laminate-Faced Architectural Cabinets.]
  - c. [Plastic-Laminate-Faced Wood Paneling.]
  - d. [Interior Architectural Woodwork.]
  - e. [Plastic-Laminate-Clad Toilet Compartments.]
  - f. [Manufactured Plastic-Laminate-Faced Casework.]
  - g. [Residential Casework.]
  - h. [Plastic-Laminate Laboratory Casework.]
  - i. [Plastic-Laminate-Clad Countertops.]
  - j. [Plastic-Laminate-Clad Case Goods.]
- D. Edge Banding:
1. Laminate Grade:

**Specifier Note:**

**Select grade or type(s) for the project.**

- a. [Grade JJ (HGS) 1.2mm.]
- b. [ABS or PP tape, 0.018-inch (0.460 mm) minimum thickness, matching laminate in color.]



- E. Backing sheets:
  - 1. Provide where recommended by manufacturer to minimize lamination warpage.
- F. Adhesives:
  - 1. Bonding Laminate: Provide type recommended by manufacturer.
  - 2. Bonding Edge Molding: Provide type recommended by manufacturer.

### **2.3 LAMINATE FABRICATION**

- A. Conform to Formica Corporation standard practices, procedures, conditions including preconditioning, panel balancing, material recommendations, machining, equipment and workmanship.
- B. FENIX materials have low sheen surfaces subject to marring. Fabricating with peel coat on surface is recommended. Router base should be clean and free of burrs and debris. Table saws should be clean, flat, and free of burrs.
- C. Do not adhere laminates directly to plaster, gypsum board or concrete construction.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION**

- A. General: Install FENIX in accordance with manufacturer's installation instructions, approved submittals and requirements of:
- B. Provide templates and rough-in measurements.
- C. Accessory Materials: Install in accordance with manufacturer's written installation instructions.

### **3.2 CLEANING AND PROTECTING**

- A. Cleaning:
  - 1. Clean FENIX surfaces and edge moldings in accordance with manufacturer's instructions.
- B. Protection:
  - 1. Do not permit construction near unprotected surfaces.



**END OF SECTION 06 05 13**