SECTION 06 42 00

COMPOSITE PANELS

Display hidden notes to specifier. (Don't know how? [Click Here](http://www.arcat.com/sd/display_hidden_notes.shtml))

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\*\* NOTE TO SPECIFIER \*\* Timber Products Co.; composite panels.  
This section is based on the products of Timber Products Co., which is located at:  
305 S. 4th St. P. O. Box 269  
Springfield, OR 97477  
Toll Free Tel: 800-547-9520  
Fax: 541-744-4296  
Email: [request info (aposton@timberproducts.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=Timber+Products+Co.&coid=36055&rep=&fax=541-744-4296&message=RE:%20Spec%20Question%20(06401tpc):%20%20&mf=)  
Web: [www.timberproducts.com](http://www.timberproducts.com)   
 [ [Click Here](http://www.arcat.com/arcatcos/cos36/arc36055.html) ] for additional information.  
At Timber Products Company, we specialize in hardwood plywood and wood panels with decorative overlays. From veneer to ultralight MDF to particle board, we offer an incredible variety of wood products.  
We specialize in hardwood plywood and wood panels with decorative overlays. From veneer to ultralight MDF to particle board, we offer an incredible variety of wood products. And if you don't see exactly what you're looking for, we can custom manufacture what you need.  
Our Ampine particleboard division specializes in composite panels responsibly created with the environment in mind. We continually improve processes to reduce waste. We use no-added formaldehyde (NAF) based resins to reduce emissions, and use 100% post-industrial recycled/recovered fiber. Manufactured for superior strength and physical properties, our products can replace MDF in many applications.   
Ampine has moisture-resistant and fire-resistant panels available for applications that are more specialized. The extra-smooth finish of our Ampine panels are ideal for painting, lamination or veneer layups.

1. GENERAL
   1. SECTION INCLUDES
      1. Composite panels for architectural applications. (Apex)
   2. RELATED SECTIONS

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

* + 1. Section 06 10 00 - Rough Carpentry.
    2. Section 06 20 00 - Finish Carpentry.
    3. Section 06 40 23 - Interior Architectural Woodwork.
    4. Section 06 42 19 - Plastic-Laminate-Faced Wood Paneling.
    5. Section 06 43 13 - Wood Stairs.
    6. Section 08 30 00 - Specialty Doors and Frames.
    7. Section 10 21 00 - Compartments and Cubicles.
    8. Section 12 30 00 - Casework.
    9. Section 12 50 00 - Furniture.
    10. Section 14 20 00 - Elevators.
  1. REFERENCES

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

* + 1. American National Standards Institute (ANSI):
       1. ANSI A208.1-2016 Particleboard.
    2. ASTM International (ASTM):
       1. ASTM D1037 - Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials.
       2. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
    3. California Air Resource Board (CARB).
       1. Awarded CARB NAF exemption due to synthetic resin system. Meets CARB ATCM, CCR 93120 Phase 2 emission requirements.
    4. California Code of Regulations (CCR):
       1. CCR 93120 - ATCM to Reduce Formaldehyde Emissions from Composite Wood Products.
    5. Collaborative for high Performance schools (CHPS).
       1. Meets Material specifications for VOC emission section 01 35 00 - Special Procedures.
    6. Composite Panel Association (CPA):
       1. CPA 4-11 Eco-Certified Composite (ECC) Sustainability Standard.
    7. Forest Stewardship Council (FSC).
       1. FSC License Code: C021324. The mark of responsible forestry (Available upon request).
    8. Scientific Certification Systems, Incorporated dba. SCS Global Services (SCS).
       1. SCS Validation: SCS-NAF-01510, No-added formaldehyde.
       2. SCS Certified: SCS-MC-01095, Recycled wood content.
    9. Underwiters Laboratories Canada (ULC):
       1. CAN/ULC-S102 - Standard Method of Test for Surface Burning Characteristics of building Materials and Assemblies.
    10. U.S. Green Building Council (USGBC)
        1. LEED - Leadership in Energy and Environmental Design
           1. LEED v4 Credit Support: MRc 3,4,7 EQc2
  1. SUBMITTALS
     1. Submit in accordance with Section 01 30 00 - Administrative Requirements.
     2. Product Data: Submit manufacturer's current published data including component materials, dimensions, standard details, and installation instructions.
  2. QUALITY ASSURANCE
     1. Single Source Responsibility: Except where indicated otherwise, provide all products and accessories from a single manufacturer.
     2. Qualifications:
        1. Manufacturer Qualifications: Minimum 5 year experience manufacturing similar products.
        2. Installer Qualifications: Minimum 2 year experience installing similar products and acceptable to the manufacturer.
  3. DELIVERY, STORAGE, AND HANDLING
     1. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.
     2. Store materials on level supports off the ground to prevent sagging. Cover loosely with waterproof material to prevent condensation from forming while protecting against weather, direct sunlight, surface contamination, and construction traffic.
     3. Handle materials to avoid damage to edges and surfaces.
  4. PROJECT CONDITIONS
     1. Maintain temperature, humidity, and ventilation within limits recommended by the manufacturer. Do not install products under environmental conditions outside manufacturer's recommended limits.
        1. For best results, Condition products to the environment 48-72 hours prior to fabrication.
  5. WARRANTY
     1. Warranty: Provide manufacturer's standard limited warranty.

1. PRODUCTS
   1. MANUFACTURERS
      1. Acceptable Manufacturers: Ampine LLC, a division of Timber Products Company; 11610 Ampine-Fibre Form Road, Sutter Creek, CA 95685. ASD. Tel: 209-223-1690; Fax: 916-623-6128; Email: marketing@timberproducts.com; Web: www.timberproducts.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 substitutions will be considered in accordance with Section 01 60 00 - Product Requirements.
  1. COMPOSITE PANELS

\*\* NOTE TO SPECIFIER \*\* Strong and resilient, with a smooth surface that can be painted, laminated or veneered for a beautiful, durable finish. Remarkable strength and machinability. Formulated specifically for your most demanding applications. Delete if not required.

* + 1. Basis of Design Apex as manufactured by Ampine. No added formaldehyde (NAF) high physical property sustainable design composite panels. The panel has been engineered for superior strength and machinability.
       1. Standards Compliance:
          1. FSC License Code: C021324. The mark of responsible forestry (Available upon request).
          2. SCS Validation: SCS-NAF-01510, No-added formaldehyde.
          3. SCS Certified: SCS-MC-01095, Recycled wood content.
          4. CHPS Compliant: Meets materials specifications for VOC emissions Section 01 35 00 - Special Procedures.
          5. ECC Certified: Specification CPA ECC 4-11.
       2. Features and Benefits:
          1. Awarded CARB NAF exemption due to synthetic resin system. Meets CARB ATCM, CCR 93120 Phase 2 emission requirements.
          2. Meets ANSI A208.1 moisture resistant specifications for MR10.
          3. Formaldehyde-free (NAF) adhesive system.
          4. Smooth uniform faces and core.
          5. FSC Mix Credit certified panels available upon request.
       3. Mill Capabilities:
          1. Range of thicknesses: 3/8 to 1-3/4 in (9 to 44 mm).
          2. Range of Widths: 48 and 60 in (1219 and 1524 mm).
          3. Lengths: Up to 24 ft (610 mm).
          4. Custom sizes available upon request.
          5. Cut-to-size and special packaging available.

\*\* NOTE TO SPECIFIER \*\* Average physical properties for 3/4 in (19 mm) panel, based on a 5 panel average, when tested in accordance with ASTM D1037. Specific design applications and technical data are available upon request.

* + - 1. Technical Data:
         1. Thickness Tolerance: Plus or minus 0.005 in (0.127 mm).
         2. Length and Width Tolerance: Plus or minus 1/16 in (1.5 mm).
         3. Squareness Tolerance: Plus or minus 1/8 in (3 mm).
         4. Thickness Swell: Less than 5.5 percent.
         5. Flame spread Rating: Class 3 (C).
         6. Density: 48 lbs per cu ft (768.9 kg per cu m).
         7. Internal Bond: 160 lbs per sq. inches (11 kg per sq cm).
         8. Modulus of Rupture: 2,900 lbs per sq. inches (200 kg per sq cm).
         9. Modulus of Elasticity: 500,000 lbs per sq. inches (40,000 kg per sq cm).
         10. Screw Holding, Face: 400 lbs (200 kg).
         11. Screw Holding, Edge: 250 lbs (110 kg).

\*\* NOTE TO SPECIFIER \*\* Moisture-resistant MR50, as defined in ANSI A 208.1-16 subsection 3.8 (MR50), composite panels offer outstanding performance in high-moisture areas, from locker rooms to coffee shops. Delete if not required.

* + 1. Basis of Design Apex MR50 as manufactured by Ampine. An exceptionally strong composite panel, exceeds the minimum performance requirements for moisture resistance set forth in ANSI A 208.1-16 subsection 3.8 (MR 50). These panels have been engineered for superior strength and machinability. Apex MR 50 has been third party tested per ASTM D 1037-12 subsection 4.3.4 for advanced bond integrity and its ability to withstand severe exposure conditions.
       1. Standards Compliance:
          1. FSC License Code: C021324. The mark of responsible forestry (Available upon request).
          2. SCS Validation: SCS-NAF-01510, No-added formaldehyde.
          3. SCS Certified: SCS-MC-01095, Recycled wood content.
          4. CHPS Compliant: Meets materials specifications for VOC emissions Section 01 35 00 - Special Procedures.
          5. ECC Certified: Specification CPA ECC 4-11.
       2. Features and Benefits:
          1. Awarded CARB NAF exemption due to synthetic resin system. Meets CARB ATCM, CCR 93120 Phase 2 emission requirements.
          2. Meets ANSI A208.1 moisture resistant specifications for MR50.
          3. Formaldehyde-free (NAF) adhesive system.
          4. Smooth uniform faces and core.
          5. FSC Mix Credit certified panels available upon request.
       3. Mill Capabilities:
          1. Range of thicknesses: 3/8 to 1-3/4 in (9 to 44 mm).
          2. Range of Widths: 48 and 60 in (1219 and 1524 mm).
          3. Lengths: Up to 24 ft (610 mm).
          4. Custom sizes available upon request.
          5. Cut-to-size and special packaging available.

\*\* NOTE TO SPECIFIER \*\* Average physical properties for 3/4 in (19 mm) panel, based on a 5 panel average, when tested in accordance with ASTM D1037. Specific design applications and technical data are available upon request.

* + - 1. Technical Data:
         1. Thickness Tolerance: Plus or minus 0.005 in (0.127 mm).
         2. Length and Width Tolerance: Plus or minus 1/16 in (1.5 mm).
         3. Squareness Tolerance: Plus or minus 1/8 in (3 mm).
         4. Flame spread Rating: Class 3 (C).
         5. Density: 50 lbs per cu ft (800.9 kg per cu m).
         6. Internal Bond: 200 lbs per sq. inches (10 kg per sq cm).
         7. Modulus of Rupture: 4000 lbs per sq. inches (300 kg per sq cm).
         8. Modulus of Elasticity: 575,000 lbs per sq. inches (40,400 kg per sq cm).
         9. Screw Holding, Face: 425 lbs (193 kg).
         10. Screw Holding, Edge: 300 lbs (100 kg).

\*\* NOTE TO SPECIFIER \*\* Used in elevators, airport jetways, kiosks, ceilings and wall panels, or anywhere else that a Class 1 (A) flame-retardant material is required. Delete if not required.

* + 1. Basis of Design Apex FR as manufactured by Ampine. A class 1 (A) fire resistant panel with outstanding physical properties and machinability. Panels have been engineered for strength and machinability.
       1. Standards Compliance:
          1. FSC License Code: C021324. The mark of responsible forestry (Available upon request).
          2. SCS Validation: SCS-NAF-01510, No-added formaldehyde.
          3. SCS Certified: SCS-MC-02470, Pre-consumer recycled wood content.
          4. CHPS Compliant: Meets materials specifications for VOC emissions Section 01 35 00 - Special Procedures.
          5. ECC Certified: Specification CPA ECC 4-11.
       2. Features and Benefits:
          1. Awarded CARB NAF exemption due to synthetic resin system. Meets CARB ATCM, CCR 93120 Phase 2 emission requirements.
          2. Formaldehyde-free (NAF) adhesive system.
          3. Class 1 (A) certified flame retardant panels.
          4. Smooth uniform faces and core.
          5. FSC Mix Credit certified panels available upon request.
       3. Mill Capabilities:
          1. Range of thicknesses: 3/8 to 1-3/4 in (9 to 44 mm).
          2. Range of Widths: 48 and 60 in (1219 and 1524 mm).
          3. Lengths: Up to 24 ft (610 mm).
          4. Custom sizes available upon request.
          5. Cut-to-size and special packaging available.

\*\* NOTE TO SPECIFIER \*\* Average physical properties for 3/4 in (19 mm) panel, based on a 5 panel average, when tested in accordance with ASTM D1037. Specific design applications and technical data are available upon request.

* + - 1. Technical Data:
         1. Thickness Tolerance: Plus or minus 0.005 in (0.127 mm).
         2. Length and Width Tolerance: Plus or minus 1/16 in (1.5 mm).
         3. Squareness Tolerance: Plus or minus 1/8 in (3 mm).
         4. Flame Spread Rating: Class 1 (A).
         5. Density: 50 lbs per cu ft (800.9 kg per cu m).
         6. Internal Bond: 180 lbs per sq. inches (13 kg per sq cm).
         7. Modulus of Rupture: 2,900 lbs per sq. inches (200 kg per sq cm).
         8. Modulus of Elasticity: 600,000 lbs per sq. inches (40,000 kg per sq cm).
         9. Screw Holding, Face: 400 lbs (200 kg).
         10. Screw Holding, Edge: 300 lbs (100 kg).

1. EXECUTION
   1. EXAMINATION
      1. Do not begin installation until adjacent construction is within manufacturers acceptable tolerance and substrates have been properly prepared.
         1. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
      2. Do not use materials with defects that would interfere with installation quality.
   2. 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. INSTALLATION
      1. Install materials in accordance with manufacturer's recommendations and in proper relationship with adjacent construction.
         1. Refer to Architectural Woodwork Standards (AWS) for fabrication and installation procedures.
   4. CLEANING
      1. Remove all excess and waste materials from the job site in accordance with the Owner's construction waste management requirements.
   5. PROTECTION
      1. Protect installed products until Substantial Completion.
      2. Repair or replace damaged products before Substantial Completion.

END OF SECTION