

DuraLife[®]

DECKING

This guide specification for **MVP Profile Decking** is presented as a resource for design professionals by DuraLife Decking, (800) 866-8101; www.duralifedecking.com. Edit to suit project requirements.

SECTION 067300 – COMPOSITE DECKING, PORCH AND DECK

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Decking made from wood and polypropylene composite material.

1.2 RELATED INFORMATION

- A. Section 061000 "Rough Carpentry" for framing, blocking, and other carpentry work associated with composite decking.
- B. Section 068100 "Composite Railings" for railings for composite decking for [decks] [and] [porches].

1.3 REFERENCES

Specifier: Retain description of references below remaining in section following editing. For projects of limited scope, delete this Article.

A. ASTM International (ASTM):

- 1. ASTM D7032 - Standard Specification for Establishing Performance Ratings for Wood-Plastic Composite and Plastic Lumber Deck Boards, Stair Treads, Guards, and Handrails.
- 2. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials

B. American Wood Preservers' Association (AWPA):

- 1. AWPA E1 – Standard Method for Laboratory Evaluation to Determine Resistance to Subterranean Termites.
- 2. AWPA E10 – Laboratory Method for Evaluating the Decay Resistance of Wood-Based Materials Against Pure Basidiomycete Cultures: Soil/Block Test.

C. International Code Council, ICC Evaluation Service, LLC:

- 1. AC 174: Deck Board Span Ratings and Guardrail Systems (Guards and Handrails).

D. National Floor Safety Institute (NFSI):

- 1. ANSI/NFSI B101.1 - Test Method for Measuring Wet SCOF of Common Hard-Surface Floor Materials.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's data sheets, installation instructions, and maintenance recommendations for composite decking materials.
- B. Product Test Reports: Upon Architect's Request: Indicating compliance of products with requirements, from a qualified independent testing agency.
- C. Sustainable Design Submittals:
 - 1. Recycled Content: Documentation indicating the percentages of post-consumer and post-industrial recycled content of composite decking materials.
- D. Samples:
 - 1. Samples for Selection: Manufacturer's standard size, for each composite decking product specified, two complete sets of samples depicting the manufacturer's full range of available colors and textures including full range of color variations within each product.
 - 2. Samples for Verification: Manufacturer's standard size, for each composite decking product selected, two samples depicting the specified color and pattern.
 - 3. Sample of each type of fastener and accessory.
- E. Shop Drawings: Provide plans and details illustrating decking layout, member spacing, and fastening methods.
- F. Manufacturer's Span Tables: Provide span tables based upon ASTM D7032, with applicable members and spans indicated.
- G. Manufacturer's Fastener Performance Tables: Provide fastener tables based upon ASTM D7032, with applicable fasteners indicated.
- H. Research Report: Provide Intertek/ATI CCRR or comparable report from certification service acceptable to authorities having jurisdiction.
- I. Warranty: Submit sample meeting warranty requirements of this Section.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Approved manufacturer listed in this section, with minimum 5 years' experience in manufacture of similar products in use in similar applications.
 - 1. Manufacturer quality control system approved by Intertek or comparable agency acceptable to Architect.
- B. Mockups: Build mockup to verify approved materials and demonstrate acceptable workmanship.
 - 1. Do not proceed with work until mockup has been approved by Architect.
 - 2. Approved mockups may be incorporated in finished work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Deliver and store products in manufacturer's unopened packaging bearing the brand name and manufacturer's identification until ready for installation.

- B. Protect materials against weather. Store on flat surface with adequate support. Provide for air circulation within and around stacks and under temporary coverings.

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form indicating manufacturer's intent to replace composite decking materials that fail within 25 years following Substantial Completion due to manufacturing defects; and to provide replacement labor during the first five years of service. Failures are defined to include the following:
 - 1. Rot, decay, splitting, checking, splintering, staining, and termite damage.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis of Design: DuraLife composite decking design is based upon products of Barrette Outdoor Living; Biddeford, ME; (800) 866-8101; www.duralifedecking.com
 - 1. Substitutions: Not permitted.
 - 2. Requests for substitutions will be considered in accordance with provisions of Instructions to Bidders and Division 01 General Requirements.
- B. Source Limitations: Obtain composite decking through one source from a single approved manufacturer.

2.2 PERFORMANCE REQUIREMENTS

Specifier: Verify local building code requirements for structural performance.

- A. Structural Performance: Provide decking components capable of meeting the following minimum design loads when installed in the configuration indicated:
 - 1. Deck: Uniform Live Load: 125 lbf/sq. ft. (6 kN/sq. m).
 - 2. Treads of Stairs: Uniform Load: 100 lbf/sq. ft. (4.79 kN/sq. m), and concentrated load: 300 lbf (1.33 kN) on area of 4 sq. in. (25.8 sq. cm), whichever produces the greater stress.
- B. Span Ratings: Provide composite decking material recommended by manufacturer for applicable framing member maximum spacings, based upon ASTM D7032.
 - 1. Comply with requirements of ICC-ES AC174.
- C. Fastener Performance Ratings: Provide fasteners for composite decking material recommended by manufacturer for applicable composite decking material and framing members, based upon ASTM D7032.
- D. Slip Resistance: Static coefficient of friction of not less than 0.59 for level floor surfaces as determined by a certified NFSI walkway auditor in accordance with ANSI/NFSI B101.0.
- E. **Recycled Content:** For products for which recycled content is available, provide products containing qualifying recycled content and submit documentation indicated under Part 1 paragraph "Sustainable Design Requirements."

2.3 COMPOSITE LUMBER

- A. Composite Lumber, General: Wood thermoplastic composite material, UV- and heat-stabilized, consisting of combination of wood fiber and polypropylene, extrusion-molded into sizes and shapes indicated, and with the following properties:
1. Termite Resistance, AWPA E1: Rating of 10.
 2. Fungal Resistance, AWPA E10: Not less than 105 percent of ACQ treated SYP.
 3. Fungal Resistance, ASTM D1413: No decay.
 4. Flame Spread, ASTM E84: Class C.
- B. Composite Decking:
1. Basis of Design Product: DuraLife Decking, [MVP Decking Profile](#).
 2. Nominal Size: 0.9 by 5.5 inches.
 3. Weight: 1.60 lb/lf.
 4. Joist Span: 16 inches OC at 90 deg.; 12 inches OC at 45 deg.
 5. Profile: Edge grooved.
 6. Fastening: [Concealed fastening clip] [Face fastened].
 7. Face Surface: Embossed wood grain textured.
 8. Color: As selected by Architect from manufacturer's full line.
- C. Fascia and Riser Boards:
1. Nominal Size, Fascia: 0.5 by 11.5 inches.
 2. Nominal Size, Riser: 0.5 by 7.5 inches.
 3. Profile: Solid.
 4. Fastening: Face fastened.
 5. Face Surface: Embossed wood grain textured.
 6. Color: As selected by Architect from manufacturer's full line.
- D. Dimensional Composite Lumber:
1. Nominal Size: 1.375 by 3.5 inches.
 2. Profile: Solid.
 3. Fastening: Face fastened.
 4. Face Surface: Embossed wood grain textured.
 5. Color: As selected by Architect from manufacturer's full line.

2.4 ACCESSORIES

- A. Resilient Concealed Fastening Strip: Molded elastomeric fastening strip configured to fit over and be fastened to exposed top of 1-1/2-inch-wide deck framing lumber. Fastening strip contains molded clips to secure edge grooved composite deck boards at required spacing.
1. Product: DuraLife Decking, [Step Clip](#)®.
- B. Concealed Fastening Clip: Polymer fastening clip configured to fit between edge-grooved composite deck boards and be fastened to deck framing lumber with recommended deck screws.
1. Product: DuraLife Decking, [Fastenator](#)™.

- C. Face Fasteners for Decking: Composite decking manufacturer's recommended trim head screws, [stainless steel] [color matched to selected decking], sized according to manufacturer's recommendations.
- D. Decking End Caps: Plastic caps of color matching selected composite decking, shaped for covering exposed ends of decking and snapping into decking edge grooves.
- E. End Cap Adhesive: Manufacturer's recommended adhesive.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.
- B. Proceed with installation of composite decking upon correction of unsatisfactory conditions.

3.2 INSTALLATION, GENERAL

- A. Install composite decking in accordance with manufacturer's recommended installation instructions, details, and requirements of authorities having jurisdiction.
 - 1. Install over support members of adequate size and spacing. Provide minimum recommended airspace beneath composite decking. Extend decking across minimum of three supports. Center joints on support.
 - 2. Provide recommended gap between deck boards for control of drainage and thermal movement. Allow recommended end-to-end gap based upon ambient temperature at time of installation.
- B. Install composite decking true to line and aligned with adjacent materials. Use secured concealed shims where necessary for alignment. Remove burrs and rough edges.

3.3 DECKING INSTALLATION, CONCEALED FASTENING STRIP

- A. Fasten channeled decking using specially profiled fastening strips with resilient clips configured to fit into side channels of deck boards. Face fasten first and last deck boards according to manufacturer's instructions.

3.4 DECKING INSTALLATION, CONCEALED FASTENING CLIP

- A. Fasten channeled decking using specially profiled fastener configured to fit inside channels of deck boards and accept face fastener to secure decking to supports. Face fasten first and last deck boards according to manufacturer's instructions.

3.5 DECKING INSTALLATION, FACE-FASTENED

- A. Fasten decking using two fasteners at each support. Locate fasteners minimum 1/2 inch from edge of decking. Pre-drill decking. Countersink screw heads.

3.6 STAIR INSTALLATION

- A. Composite Stair Treads and Risers: Secure composite treads and risers by face fastening to carriages. Countersink screw heads. Extend treads over carriages.
 - 1. Install stairs with no more than 3/16-inch variation between adjacent treads and risers and with no more than 3/8-inch variation between largest and smallest treads and risers within each flight.

3.7 END CAP INSTALLATION

- A. Fit end caps to exposed ends of composite decking, apply adhesive, and press into place in accordance with manufacturer's written instructions.

3.8 CLEANING

- A. Clean surfaces as required, following procedures and employing cleaning materials as recommended by decking manufacturer.

3.9 PROTECTION

- A. Protect installed products from damage by subsequent construction activities, until completion of Project.
- B. Field repair of damaged product finishes is limited to surface scratch repairs only. Use manufacturer's recommended field repair procedures. Replace products that have been structurally damaged by subsequent construction activities.

END OF SECTION