BUILDING A DECK

VALLEY INSPECTION SERVICES
29923 145TH STREET N
PRINCETON MN  55371
(Main) 651-755-6165
MICK.KAEHLER@YAHOO.COM

This handout is intended only as a guide and is based in part on the 2015 Minnesota Residential Code, local ordinances, and good building practice. While every attempt has been made to insure the correctness of this handout, no guarantees are made to its accuracy or completeness. Responsibility for compliance with applicable codes and ordinances falls on the owner or contractor. For specific questions regarding code requirements, refer to the applicable codes or contact your local Building Department.

BUILDING PERMITS

Building permits are required for decks with the following exception: freestanding decks, regardless of size, if they are not more than 30 inches above adjacent grade. Freestanding decks do not require footings that extend below the frost depth. Building permits are not required for patios made of concrete or pavers on grade.

Building permits can be obtained from the Building Department by filling out an application and submitting your building plans. Building permits are typically processed within 5 business days of receiving a complete set of plans.

PERMIT EXPIRATION

If you suspend work on your deck for more than 180 days since permit issuance or your last inspection, your permit will expire. If unforeseen circumstances delay construction, contact the Building Department before your permit expires.

PLANS

The Building Department has a handout illustrating what needs to be included on deck plans. It is very important that your plans depict exactly how your deck will built. Plans must be neat and be of a scale of at least ¼” = 1’. Computer generated plans from home stores are not acceptable and will be returned. Plans are reviewed for code compliance and a copy is returned to the applicant with notes to identify required corrections. PLEASE REVIEW THE PLANS WHEN THEY ARE RETURNED TO YOU SO THAT YOU WILL BE AWARE OF ANY CORRECTIONS NEEDED. The City only maintains plans for one year after completion of a residential deck. You may wish to retain a copy of your approved plans, permits, and inspection record cards for any future needs.

INSPECTIONS

1. Call 24 hours in advance
2. Have address, permit number, and type of inspection (ex. footing) ready
3. Let scheduler know if you wish an exact time
4. Footing Inspection - Holes dug, loose material/water removed. Plans and record card on-site.
5. Final Inspection - All work complete and all stairs, handrails, and guards in place. Plans and record card on-site. Installation instructions for composite decking on site.
6. If work is approved, the inspector will sign the record card and you may proceed with the next step
7. If corrections are noted, a correction notice will be left on the site. If a re-inspection is required it will be noted on the notice.

Please do not hesitate to call the Building Department at 651-755-6165 if you have questions. If necessary, we will be happy to meet with you on the site to help resolve any concerns or problems.
THINK YOU MIGHT ENCLOSE YOUR DECK IN THE FUTURE?

Deck plans are approved on the assumption that the deck will be used only as a deck for the life of the structure. Because footing sizes, setbacks, structural supports, and a host of other deck components are different for enclosed spaces than they are for decks, it is important that you indicate on your plans the desire to convert the deck at a future date. You should then design your deck to carry future loads and meet setbacks and other rules.

ZONING REGULATIONS

Decks are permitted as an addition to a dwelling in a side or rear yard or as a freestanding structure. Setbacks are routinely checked as a part of the plan review and again at the time of the footing inspection. **Easements, wetland buffers and other lot restrictions may require greater setbacks than permitted by the zoning ordinance.** The most restrictive setback applies.

SURVEY MARKER EXAMPLES
Call Gopher State One Call for utility locations at least two working days before you dig – 1-800-252-1166 or 651-454-0002.

MATERIALS

Fasteners

Nails and other hardware must be hot-dipped zinc-coated (galvanized), stainless steel or equal. Screws should be either hot-dipped galvanized or electroplated with a polymer coating. 12d nails are recommended on nominal 2-inch decking. 10d nails are recommended for 5/4” decking.

With lag screws, use a flat washer under the head. Use washers under the nut and head of machine bolts and just under the nut of carriage bolts.

Lumber

All wood used in deck construction must be pressure treated lumber or wood that is naturally resistant to decay such as redwood or cedar.

Wood used above ground, in contact with the ground, or below ground requires different degrees of treatment. Check the labels of the material you are buying to determine where it can be used. Because some preservative treatments are very corrosive, make sure that any fasteners or metal connectors used in the construction of your deck are approved by the manufacturer for use with treated wood.

Decking

Materials commonly used for decking include standard dimension lumber (either 2X4 or 2X6), radius-edged decking, or a manufactured decking product.

Radius-edged Patio Decking (5/4 decking) has been specifically developed for outdoor decks. Redwood and cedar patio decking is intended to be used flat-wise in load-bearing applications where spans do not exceed 16” o.c. (12” o.c. when installed diagonally to joists). Southern pine decking may span 24” o.c. or 16” o.c. when installed diagonally to joists. Manufactured decking products may be used only when meeting ASTM D 7032 or when approved by the Building Department. Approval is based on the material carrying an ICC Evaluation Services Report. Decking without a report will not be approved. Ask the decking supplier to provide you with a copy of the research report. The Building Department maintains a list of composite decking materials that meet US building codes that is available upon request. Caution – some manufactured deck products are approved for decking but not for stair treads. In some cases where manufactured decking is approved for stairs, the spacing of supports may be significantly reduced compared to use on the deck itself. Read the research report for further information.

MAXIMUM DECK BOARD SPANS

<table>
<thead>
<tr>
<th>Material Description</th>
<th>Maximum Span</th>
</tr>
</thead>
<tbody>
<tr>
<td>2x6 or 5/4 southern pine perpendicular to joist</td>
<td>24” O.C.</td>
</tr>
<tr>
<td>5/4 cedar or redwood and 2x4 perpendicular to joist</td>
<td>16” O.C.</td>
</tr>
<tr>
<td>Or 5/4 southern pine or 2x6 at 45 degrees to joist</td>
<td>16” O.C.</td>
</tr>
<tr>
<td>5/4 and 2x4 at 45 degrees to joist</td>
<td>12” O.C.</td>
</tr>
</tbody>
</table>

FOOTINGS

Footings supporting a 4x4 column must be not less than 6-inch diameter. Post footings supporting columns larger than 4x4 must be 8-inch diameter or larger. The bottom of post footings may be “belled” to achieve the desired minimum bearing area. The base of the footing must be at least 42 inches below finished grade. Rebar is recommended. Center the column on the footing secured by a pin or connector. Posts imbedded in the ground...
must be 60% C.C.A. or equal. Using a fiberboard tube will allow elevation of the top of the footing above finished grade to provide protection of the wood post from lawn mowers and trimmers.

**UNDERSTANDING LOAD PATHS**

![Diagram showing load paths]

Deck footings should be sized according to the following table. Footings must extend at least 42 inches below grade (frost line) except for decks that are not connected to a dwelling. The minimum compressive strength of concrete used for deck footings is 5000 psi.

<table>
<thead>
<tr>
<th>Max. Area of Deck Supported in Sq Ft</th>
<th>Footing Diameter Required in Inches</th>
<th>Max. Area of Deck Supported in Sq Ft</th>
<th>Footing Diameter Required in Inches</th>
<th>Max. Area of Deck Supported in Sq Ft</th>
<th>Footing Diameter Required in Inches</th>
<th>Max. Area of Deck Supported in Sq Ft</th>
<th>Footing Diameter Required in Inches</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>8</td>
<td>12</td>
<td>41</td>
<td>16</td>
<td>65</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>9</td>
<td>27</td>
<td>13</td>
<td>47</td>
<td>17</td>
<td>72</td>
<td>21</td>
</tr>
<tr>
<td>16</td>
<td>10</td>
<td>32</td>
<td>14</td>
<td>53</td>
<td>18</td>
<td>79</td>
<td>22</td>
</tr>
<tr>
<td>19</td>
<td>11</td>
<td>36</td>
<td>15</td>
<td>59</td>
<td>19</td>
<td>86</td>
<td>23</td>
</tr>
</tbody>
</table>

Required footing sizes are determined by calculating the area of the deck supported by each footing. Loads shall be assumed to be equally shared between the supporting elements. Don’t overlook cantilevers. The minimum compressive strength of concrete used for deck footings is 5000 psi.

**THE REQUIRED AREA OF THE COLLUMN SHOULD FULLY BEAR ON THE FOOTING**

![Diagram showing required area of column]

- 4 -
The minimum compressive strength of concrete used for deck footings is **5000 psi**.

**WHERE DO I PUT MY FOOTINGS?**

**ANCHORING POST BASE**

**DECK FRAMING**

**ATTACHMENT OF LEDGER BOARD TO WOOD JOISTS (2X6, 2X8, 2X10, 2X12)**

Make sure the ledger is securely attached to the dwelling. Install metal flashing at top and caulk sides.

**TABLE R507.2**

FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND
A 2-INCH-NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST

(Deck live load = 40 psf, deck dead load = 10 psf)

<table>
<thead>
<tr>
<th>JOIST SPAN</th>
<th>6' and less</th>
<th>6'1” to 8’</th>
<th>8’1” to 10’</th>
<th>10’1” to 12’</th>
<th>12’1” to 14’</th>
<th>14’1” to 16’</th>
<th>16’1” to 18’</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection details</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>½ inch diameter lag screw with ⅞ inch maximum sheathing</td>
<td>30</td>
<td>23</td>
<td>18</td>
<td>15</td>
<td>13</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>½ inch diameter bolt with ⅞ inch maximum sheathing</td>
<td>36</td>
<td>36</td>
<td>34</td>
<td>29</td>
<td>24</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>½ inch diameter bolt with ⅞ inch maximum sheathing and ½ inch stacked washers</td>
<td>36</td>
<td>36</td>
<td>29</td>
<td>24</td>
<td>21</td>
<td>18</td>
<td>16</td>
</tr>
</tbody>
</table>

a. The tip of the lag screw shall fully extend beyond the inside face of the band joist.
b. The maximum gap between the face of the ledger board and face of the wall sheathing shall be ½ inch.
c. Ledgers shall be flashed to prevent water from contacting the house band joist.
d. Lag screws and bolts shall be staggered in accordance with Section R507.2.1.
e. Deck ledger shall be minimum 2 × 8 pressure-preservative-treated No. 2 grade lumber, or other approved materials as established by standard engineering practice.
f. When solid-sawn pressure-preservative-treated deck ledgers are attached to a minimum 1-inch-thick engineered wood product (structural composite lumber, laminated veneer lumber or wood structural panel band joist), the ledger attachment shall be designed in accordance with accepted engineering practice.
g. A minimum 1 × 9½ Douglas Fir laminated veneer lumber rimboard shall be permitted in lieu of the 2-inch nominal band joist.
h. Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch in thickness shall be permitted. The maximum distance between the face of the ledger board and the face of the band joist shall be 1 inch.

Capacity of lag or carriage bolts shall not exceed 400 lb’s per bolt unless design provided.

**TABLE 507.2.1**

<table>
<thead>
<tr>
<th>PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS</strong></td>
</tr>
<tr>
<td><strong>TOP EDGE</strong></td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td><strong>Ledger</strong></td>
</tr>
<tr>
<td><strong>Band Joist</strong></td>
</tr>
</tbody>
</table>

a. Lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Figure R507.2.1(1).
b. Maximum 5 inches.
c. For engineered rim joists, the manufacturer’s recommendations shall govern.
d. The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure R507.2.1(1).
PLACEMENT OF LAG SCREWS AND BOLTS IN BAND JOISTS

EXTERIOR SHEATHING

EXISTING STUD WALL

EXISTING 2X BAND JOIST OR ENGINEERED RIM BOARD

2" MIN

1-1/8" MIN

5" MAX

2" MIN

DECK JOIST

LAG SCREWS OR BOLTS

FLOOR FRAMING

EXISTING FOUNDATION WALL

JOIST HANGER

1/2" DIAMETER LAG SCREWS MINIMUM

Lag screws must be hot-dipped galvanized or stainless steel only

1-1/2" shank (no threads)

Length must extend through existing band joist

400# MAXIMUM LOAD PER LAG

Screw must penetrate beyond band board a minimum of 1/2"

Ledger Flashing

Joist Hanger

Back Flashing

Ledger may be spaced 1/2" maximum
LATERAL LOAD CONNECTIONS
TWO MINIMUM PER DECK

FLOOR JOIST
WALL SHEATHING

HOLD-DOWN DEVICES

DECK JOIST

FLOOR JOISTS
PERPENDICULAR TO DECK LEDGER

FLOOR JOISTS
PARALLEL TO DECK LEDGER
IN ALL CASES, MANUFACTURE’S INSTALLATION INSTRUCTIONS MUST BE FOLLOWED
### BEAMS

Construct beams using two or more 2 inch nominal pieces of lumber. Nail beams together using 10d nails at 32 inches o.c. along each edge of the beam and staggered. A spacer may be used to fit the beam to a 3½-inch width. Beams should be installed with any arch or crown facing up. Attachments to columns should be with post caps designed for such use. Splices must occur over columns.

#### BEAM SPANS (Wet Service)

<table>
<thead>
<tr>
<th>Species</th>
<th>Beam Size</th>
<th>Joist Spans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6’</td>
<td>8’</td>
</tr>
<tr>
<td>Southern Pine</td>
<td>2-2X6</td>
<td>7’1”</td>
</tr>
<tr>
<td></td>
<td>2-2X8</td>
<td>9’2”</td>
</tr>
<tr>
<td></td>
<td>2-2X10</td>
<td>11’10”</td>
</tr>
<tr>
<td></td>
<td>2-2X12</td>
<td>13’11”</td>
</tr>
<tr>
<td></td>
<td>3-2X6</td>
<td>8’7”</td>
</tr>
<tr>
<td></td>
<td>3-2X8</td>
<td>11’4”</td>
</tr>
<tr>
<td></td>
<td>3-2X10</td>
<td>14’5”</td>
</tr>
<tr>
<td></td>
<td>3-2X12</td>
<td>17’5”</td>
</tr>
<tr>
<td>Cedar, Redwood, Ponderosa Pine</td>
<td>2-2X6</td>
<td>5’5”</td>
</tr>
<tr>
<td></td>
<td>2-2X8</td>
<td>6’10”</td>
</tr>
<tr>
<td></td>
<td>2-2X10</td>
<td>8’4”</td>
</tr>
<tr>
<td></td>
<td>2-2X12</td>
<td>9’8”</td>
</tr>
<tr>
<td></td>
<td>3-2X6</td>
<td>7’4”</td>
</tr>
<tr>
<td></td>
<td>3-2X8</td>
<td>9’8”</td>
</tr>
<tr>
<td></td>
<td>3-2X10</td>
<td>12’0”</td>
</tr>
<tr>
<td></td>
<td>3-2X12</td>
<td>13’11”</td>
</tr>
</tbody>
</table>
COLUMNS

MAXIMUM POST HEIGHT IN FEET

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>SIZE</th>
<th>36</th>
<th>48</th>
<th>60</th>
<th>72</th>
<th>84</th>
<th>96</th>
<th>108</th>
<th>120</th>
<th>132</th>
<th>144</th>
<th>156</th>
<th>165</th>
<th>180</th>
<th>192</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTHERN PINE</td>
<td>4X4</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>4X6</td>
<td>14</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>6X6</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>15</td>
<td>14</td>
<td>13</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>REDWOOD</td>
<td>4X4</td>
<td>10</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CEDAR</td>
<td>4X6</td>
<td>14</td>
<td>13</td>
<td>12</td>
<td>11</td>
<td>10</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6X6</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>17</td>
<td>16</td>
<td>13</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

JOISTS

JOIST SPANS (Wet Service)
(Source AF&PA; rev. 8-17-10)

<table>
<thead>
<tr>
<th>JOIST SIZE</th>
<th>SOUTHERN PINE</th>
<th>WESTERN CEDAR/PONDEROSA PINE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12&quot; oc</td>
<td>16&quot;oc</td>
</tr>
<tr>
<td>2X6</td>
<td>10'4&quot;</td>
<td>9'5&quot;</td>
</tr>
<tr>
<td>2X8</td>
<td>13'8&quot;</td>
<td>12'5&quot;</td>
</tr>
<tr>
<td>2X10</td>
<td>17'5&quot;</td>
<td>15'10&quot;</td>
</tr>
</tbody>
</table>

- 11 -

rev. 03-25-15
JOIST DETAILS

Joist spacing is determined by the type of decking used. 16" o.c. spacing must be used with 5/4 decking or when 2x6 or 2x4 decking is used at a 45° angle. 12" o.c. spacing required when 5/4 decking is used at a 45° angle.

WOOD DECKING

JOIST TO BEAM ATTACHMENTS

CONVENTIONAL HANGER

FILL ALL NAIL HOLES!

CONCEALED FLANGE HANGER

OVERLAPPED JOISTS

STRAP TIE

DROPPED BEAM

HEADER BEAM

JOISTS CROWN UP
Joists must bear on a beam, ledger strip, or joist hangers. Joist hangers must be installed in accordance with the manufacturer’s recommendations. *Fill all nail holes in joist hangers.*

### MAXIMUM CANTILEVER SPANS FOR JOISTS WITH BACKSPAN AT LEAST 2:1

<table>
<thead>
<tr>
<th>JOIST SIZE</th>
<th>SPACING O.C.</th>
<th>MAX. CANTILEVER</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X8</td>
<td>12”</td>
<td>39”</td>
</tr>
<tr>
<td>2X8</td>
<td>16”</td>
<td>34”</td>
</tr>
<tr>
<td>2X10</td>
<td>12”</td>
<td>57”</td>
</tr>
<tr>
<td>2X10</td>
<td>16”</td>
<td>49”</td>
</tr>
<tr>
<td>2X10</td>
<td>24”</td>
<td>40”</td>
</tr>
<tr>
<td>2X12</td>
<td>16”</td>
<td>67”</td>
</tr>
<tr>
<td>2X12</td>
<td>24”</td>
<td>54”</td>
</tr>
</tbody>
</table>
CANTILEVERS
THE AMOUNT OF CANTILEVER IS LIMITED BY THE SIZE AND SPACING OF THE JOIST AND THE LENGTH OF THE BACKSPAN

BACKSPAN
CANTILEVER

SPECIAL FLOOR FRAMING DETAILS

SEE THE ILLUSTRATION AT THE TOP OF PAGE TOP OF PAGE 7 FOR MORE DETAILS ON LEDGER ATTACHMENT.

WARNING: DO NOT EXCEED CAPACITY OF CONNECTORS WHEN SUPPORTING ENDS OF BEAMS.

ALTERNATE DESIGN: INSTALL FOOTING AND COLUMN UNDER GIRDER

WARNING: CAPACITY OF LAG OR CARRIAGE BOLTS SHALL NOT EXCEED 400 LB’S PER BOLT UNLESS DESIGN PROVIDED.
STAIRS

Stairs must have a maximum rise of \(7\frac{3}{4}\) inches and a minimum run of 10 inches measured as shown. The greatest riser height within any flight of stairs shall not exceed the smallest by more than \(\frac{3}{4}\) inch. The greatest tread depth within any flight of stairs shall not exceed the smallest by more than \(\frac{3}{4}\) inch. Open risers are permitted provided that a 4” diameter sphere will not pass between the treads.

Stairs must be a minimum of 36 inches wide above the handrail and 31½ inches below the handrail.

FIRE PROTECTION OF DECK FLOORS

Effective with the adoption of the 2015 Minnesota Residential Code, floors framed with 2X6 or 2X8 dimension lumber must be protected on the underside with one layer of \(\frac{5}{8}\)” treated plywood.

NOTE: Some composite deck manufacturers prohibit the use of their product with a ceiling below.
STAIR TERMINOLOGY

- The maximum riser height is 7 3/4 inches
- The minimum tread run is 10 inches
- Treads and risers should be approximately equal with the largest not exceeding the smallest by more than 1/4 inch.

LAYING OUT STAIR JACKS

10" run
7 3/8" rise

Set your square at the rise and run calculated previously.

DETERMINING RISE/RUN

Example:
- Assume that H equals 37 inches
- Divide 37 by 7 3/8" (37" ÷ 7 3/8" = 4.8)
- Rounding up to the next whole number gives the number of risers
- There will be 5 risers
- Divide 37 by 5 (37" ÷ 5 = 7.4" or about 7 3/8"
- Each riser will be 7 3/8"
- For 5 risers there will be 4 treads
- Since each tread must be at least 10", the length of the stair from the face of the deck to the face of the bottom riser will be at least 40" (10" x 4 treads = 40"

THE COMPLETED STAIR

5 equal risers of 7 3/8"
4 equal runs of 10"

Thickness of tread cut off bottom of stair jack results in all risers being equal when treads are applied.

TREADS: 2X6 SOUTHERN PINE
2X8 OR LARGER FOR OTHER SPECIES

18" Max. 18" Max.
Min. of 3 cut stringers

STRINGERS

STAIR STRINGER SPANS

LANDINGS OR COLUMNS AND BEAMS MAY BE USED TO SHORTEN STRINGER SPANS

CUT STRINGER

Max. Span 7' for Southern Pine
6' for other species

MIN. 5"

SOLID STRINGER

Max. Span 16'8" for Southern Pine
13'3" for other species
Guards and handrails must be provided as shown on the following illustrations. Guards must continue down stairs where the stair is more than 30 inches above grade. The height of guards on stairs must be 34 inches minimum.

Handrails must be provided on at least one side when there are four or more risers. Handrails must have returns on each end or terminate in a newel post. Other handrail shapes having an equivalent gripping shape may be used with prior approval of the Building Department.

Handrails must be continuous for the entire length of the stairs and may not be interrupted by newel posts except at landings.

Hand rails and guards must be designed to support a 200 lb load applied in any direction at any point along the top of the guard or rail. The bottoms of the stringers should rest on a sound foundation such as a gravel bed, a concrete pad, pavers, or similar.
HANDRAILS MUST RETURN TO A NEWEL POST AND BE CONTINUOUS WITHOUT INTERUPTION FOR THE LENGTH OF THE FLIGHT
COMPOSITES AND OTHER DECK/RAILING PRODUCTS

Wood/plastic composites used for exterior deck boards, stair treads, handrails and guardrail systems must bear labels indicating compliance with ASTM D 7031 or a current ICC Evaluation Services Report must be made available.

Wood/plastic composites complying with ASTM D 7031 must be installed in accordance with the manufacturer’s written installation instructions.

Wood/plastic composites having an ICC ES Report must be installed in accordance with the manufacturer’s installation instructions and the report.

READ THE INSTRUCTIONS AND THE REPORTS CAREFULLY. ALL PRODUCTS HAVE SPECIFIC REQUIREMENTS FOR STAIR TREADS. SOME ARE LIMITED TO INSTALLATION PERPENDICULAR TO JOISTS ONLY.

PRODUCTS MADE OF ALUMINUM, STEEL, GLASS, OR ANY OTHER MAN MADE PRODUCT MAY BE USED IF THE MANUFACTURER HAS A RESEARCH REPORT FROM THE INTERNATIONAL CODE COUNCIL AND THE PRODUCT IS INSTALLED IN STRICT ACCORDANCE WITH THAT REPORT OR SITE SPECIFIC ENGINEERING IS PROVIDED.