

OPTIMA[®] DECK

Decking Installation Instructions

Please read and follow these installation instructions
for a successful OPTIMA[®] deck project.



Planning

OPTIMA® decking is available in both square-edge, and grooved boards. In planning your project, you'll want to figure which board is ideal for your installation situation. **OPTIMA**® grooved boards allow a virtually fastener-free surface through the use of **OPTIMA**® **Clip** hidden fasteners, while **OPTIMA**® square-edge boards must be face-screwed, or altered to accept a hidden fastener. In most applications, it is recommended to use **OPTIMA**® square-edge boards for stair treads and perimeter & feature boards.

When installing **OPTIMA**® deck boards, it's a good idea to mix boards on site as you install them, to find the ideal variation of color tones. It's also good practice to allow the boards to acclimate to ambient temperatures before installing. This will minimize the effect of temperature-driven expansion and contraction of the deck boards.

Be sure to use the proper fastener for your installation. Use Genuine Green Bay Decking color-matched **OPTIMA**® Screws, and **OPTIMA**® **Clips** to ensure premium results.

Because of its unique core-composition of BioDac®, rice hulls, and other high-quality ingredients, **OPTIMA**® decking differs from

wood- or PVC-based composites. Therefore, **OPTIMA**® has different handling and installation requirements that should be taken into consideration as you plan your project.

Read through this entire installation manual as you plan your project, and before beginning installation. Please call Green Bay Decking at 877-804-0137 if you should have any additional questions not covered in this manual.

Always consult with and follow local and regional building codes as you plan and undertake your deck project. Most municipal codes have very specific deck construction requirements and restrictions. Failure to follow these requirements can result in costly post-construction modifications. Additionally, be sure to follow the instructions in this manual that specifically pertain to **OPTIMA**® decking products. Failure to do so may affect your Green Bay Decking warranty.

It's always a good idea to consult with a decking professional, to assure a quality project using Green Bay Decking products. Call us directly at 877-804-0137 with installation questions, or to help locate a qualified installer of Green Bay Decking products.

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Installation Tools

Typical woodworking tools can be used to install **OPTIMA**[®] decking. A general list of tools you'll need includes the following:

- Safety glasses
- Hearing protection
- Tape measure
- Circular saw (with 24-tooth carbide blade)
- Jig saw
- Pencil
- Chalk line
- Framing square
- Driver with clutch or screw-depth settings (to avoid overdriving screws)
- Utility knife

Cautions



Store Flat



No Dumping



Do Not Burn



Protective Gear

Unloading, Storage and Handling **OPTIMA**[®]

OPTIMA[®] deck boards should be stored on a dry, flat surface with support every 48 inches. Do not stack **OPTIMA**[®] more than four skids high.

Expansion & Contraction

Every material expands and contracts as temperatures change, and composite decking is no exception. Avoid potential problems by allowing time for proper acclimation of **OPTIMA**[®] to local temperatures.

It is best to mark, cut, and install boards when they are all at roughly the same temperature. Boards that have been in the sun for several hours will have expanded more than those kept in the shade, and consequently will contract more when they cool.

If possible, install **OPTIMA**[®] during the coolest part of the day. Although the ideal temperature for installation is 60 degrees Fahrenheit, this is not always possible. Thus, these steps help reduce the effects of expansion and contraction: storing boards in the shade; making final cuts after boards have cooled.

Framing Your Deck

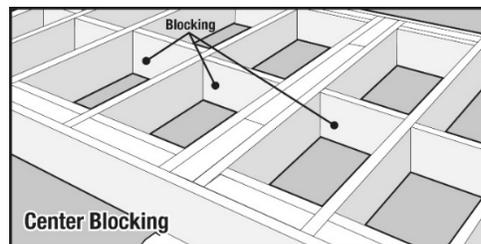
Layout your deck frame using techniques outlined in the most current International Residential Code (IRC), as well as local code requirements. Again, a decking specialist can best determine good framing practices for your project.

Joist Spacing

OPTIMA[®] deck boards can span joists installed at 16" on center, when installed perpendicular to the joists. Joist spacing must be reduced to 12" on center for diagonal **OPTIMA**[®] board installation.

Blocking

While internal blocking is not required, it can help to establish and maintain structural stability and plane across the deck surface. Joists should be installed with 3 points of support. If the deck structure only features a ledger and one carrying beam, you should also install internal blocking (bridging).



Stair Stringers

OPTIMA® deck boards can be used for stair treads, with adequate care taken for structural support. Stair stringer spacing should be 12" or less.

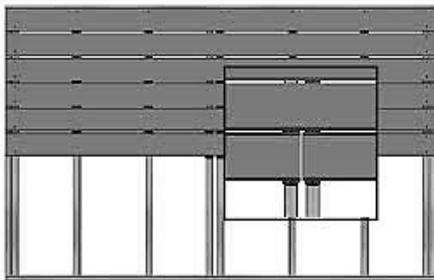
Ventilation

If a deck is constructed close to the ground, be sure to consult ventilation recommendations of the structural-material manufacturer. **OPTIMA**® deck boards do not require underdeck ventilation.

Butt Joints

If installing **OPTIMA**® boards using butt joints (end to end), double joists are required, so that no fastener is installed within 1" of board end. Sister joists may also be installed. The sister joist may be small dimension lumber such as a 2x4, as long as the sister joist is securely fastened to the structural joist.

Be sure to allow minimum 3/16" gap between board ends—smaller if installation temperature



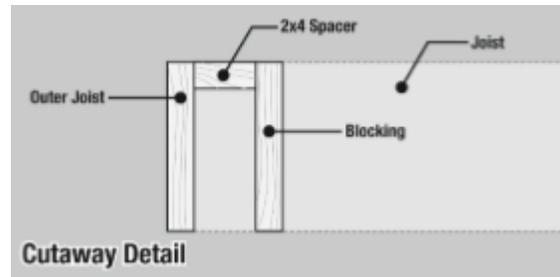
is above normal, larger if below normal—as boards tend to expand with increased temperatures.

Perimeter or Feature Board Installation

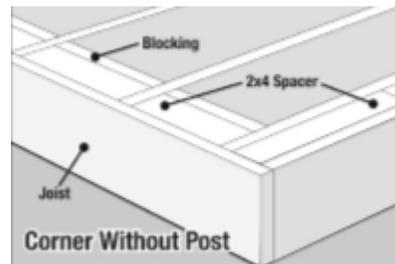
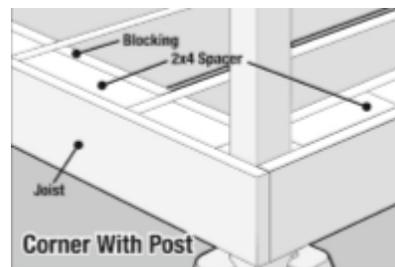
Perimeter or feature boards, using **OPTIMA**® square edge boards, can add visual appeal and character to a deck's aesthetic appeal. But adequate support must be afforded to accomplish such design considerations. Be sure

to install structural support to assure that **OPTIMA**® deck boards do not extend more than 1" beyond any supporting structure.

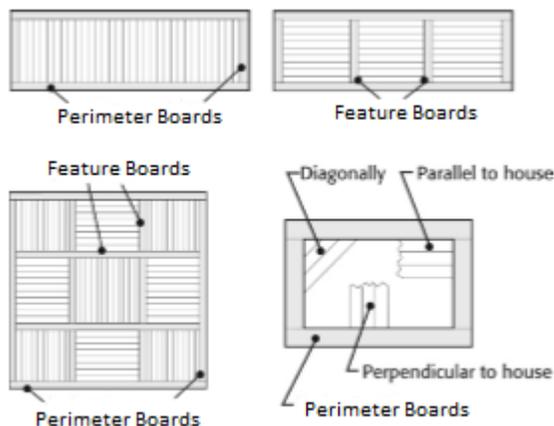
The below illustration shows framing designed to support a perimeter (picture frame) board. This setup provides structure to which you can attach a perimeter board, and also provides a structural landing to which you can attach the board ends.



The two illustrations below show how to prepare your structure, at corners, to accept a perimeter board with and without an internal railing post. The same physical principles should be used to prepare your structure to accept a feature (ribbon strip) board, which can introduce aesthetically-pleasing elements into your deck, and can also facilitate installation of decking on a deck that is longer than available deck boards.



Below are some examples of where Perimeter and Feature Boards might be introduced.



Gapping and spacing *Optima*® Deck Boards

When installing **OPTIMA**®, edge-to-edge board spacing must be a minimum of 3/16". While **OPTIMA**® Clips are self-spacing, square-edge board installation will require the use of a secondary gapping tool.

End-to-end board spacing must also meet a 3/16" minimum gap, to allow for expansion and contraction of deck boards with variations in temperature. However, if you are installing *Optima*® decking in extremely hot conditions, the gap may be reduced, as boards are likely to contract when the temperature cools.

Alternately, if it is very cold at the time of installation, the full 3/16" must be allowed as the boards will expand when temperatures warm.

Fasteners

When installing **OPTIMA**® grooved deck boards, use of genuine **OPTIMA**® Clips is required, and will provide premium results. Use of alternative hidden fasteners is not recommended, and may adversely affect the performance of the **OPTIMA**® deck boards, as well as the product warranty.

It is recommended that two Genuine Green Bay Decking **OPTIMA**® screws be installed at each board end, in concert with **OPTIMA**® Clips, to minimize the possibility of board migration with expansion and contraction caused by seasonal temperature variations.

Do not install screws within 1" of any board end. It is further recommended that a 1/8" pilot hole be pre-drilled where a screw is to be installed within 1 1/2" of any board end.

Two **OPTIMA**® Clips should be installed at butt joints, with one clip holding each board end. Also see above recommendation for two **OPTIMA**® screws in each board end.

When installing **OPTIMA**® square-edge deck boards, use of Genuine Green Bay Decking color-matched **OPTIMA**® decking screws is recommended. Two screws should be installed in each board at each joist.

Do not install screws within 1' of the end of any deck board. (Remember: Butt joints require double joists, which provides plenty of room to secure the deck board with screws at least 1" from the board end.) It is recommended that a 1/8" pilot hole be pre-drilled where a screw is to be installed within 1 1/2" of any board end.

Figuring your fasteners:

OPTIMA® Clips

You will need one **OPTIMA**® Clip per board, per joist. (Plus, we recommend four **OPTIMA**® screws per board.)

See the table, below, to help figure your fasteners.

OPTIMA® Screws

You will need 2 screws per joist, per deck board, plus 2 additional screws per board (2 face screws at each end).

The following table can help you figure how many fasteners you will need.

Joist Spacing →→		Square Edge Boards		Groove Edge Boards	
		12" OC	16" OC	12" OC	16" OC
Screws	12' <i>Optima</i> ® Boards	26	10	4	4
	16' <i>Optima</i> ® Boards	34	13	4	4
	20' <i>Optima</i> ® Boards	42	16	4	4
Clips	12' <i>Optima</i> ® Boards			13	10
	16' <i>Optima</i> ® Boards			17	13
	20' <i>Optima</i> ® Boards			21	16



Congratulations! As a GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™ or OPTIMA® Deck owner, you have made a wise investment and you are protected by our lifetime limited warranty, which provides coverage against:

- **Manufacturing Defects**
- **Splintering, Splitting, and Delaminating**
- **Termite Damage**
- **Rot, Mildew, Fungal Decay, and Mold Damage**
- **Significant Color Fade or Discoloration**

Lifetime Limited Warranty

Green Bay Decking, LLC (hereinafter “Manufacturer”) warrants that its GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck products are manufactured from recovered cellulose (Biodac and rice hulls) and high density polyethylene, and are free of manufacturer’s defects, will not splinter, split, or delaminate, suffer structural damage from termites, rot, mildew, fungal decay, or mold when properly installed and maintained. Mildew or mold may form on the surface of your deck as a result of environmental pollution and debris. Such surface contamination will not harm your deck and can be removed by occasional cleaning with mild household cleaners or commercial deck cleaning products using a nylon brush. Always test clean a small area before proceeding. Additional cleaning and maintenance instruction can be found at www.GreenBayDecking.com.

GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck are designed to resist the effects of exposure to the sun and environmental elements and will provide many years of excellent service. However, like all materials, GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck will be subject to some color change when exposed to the sun’s ultraviolet rays. GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck are manufactured with a lubricating material that will weather away within the first four months, fully revealing the intended color of the deck. Significant color fade is hereby defined as a change in color that is greater than five Delta E (CIE L*a*B*) units as defined by ASTM D2244 for the four basic Green Bay Decking colors. Significant color fade for the TerrainDeck™ and I.Dekk Terrain™ colors is defined as color change that continues beyond the first four months of initial exposure to the sun’s ultraviolet rays. It will be the responsibility of the owner to provide the original invoice and documented proof of the degree of color change.

MANUFACTURER’S LIABILITY UNDER THIS WARRANTY IS LIMITED SOLELY TO REPLACEMENT OF DEFECTIVE GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, or OPTIMA®Deck PRODUCTS, OR REFUND AT THE MANUFACTURER’S DISCRETION, WITH THE FIRST 10 YEARS BEING NON-PRORATED AND THE FOLLOWING 15 YEARS BEING CALCULATED ON A STRAIGHT-LINE DEPRECIATING BASIS. AFTER THE 25TH YEAR, WARRANTY WILL CONTINUE AT THE RATE THAT APPLIES TO THE 25TH YEAR. Purchaser’s sole and exclusive remedy for any claim whatsoever, whether in contract, warranty, tort or strict liability, arising out of the use, storage or possession of the manufacturer’s products, including without limitation any claim that the manufacturer’s products failed to perform as warranted, shall be as stated in the first sentence of this paragraph. To enter a warranty claim, the original owner must submit its claim together with this warranty certificate, the original purchase invoice indicating the date of purchase, pictures of the defective products, and a detailed written description to **Green Bay Decking, LLC. 1518 South Broadway, Green Bay, WI 54304. This new Lifetime Limited Warranty applies only to GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck products purchased on or after June 01, 2016. In those states where a Limited Lifetime Warranty is defined as something less than “lifetime” this warranty becomes a 25 Year Limited Warranty.**

THE WARRANTY SHALL NOT APPLY TO GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck PRODUCTS THAT HAVE NOT BEEN INSTALLED IN ACCORDANCE WITH MANUFACTURER’S AND ICC GUIDELINES (REPORT NO. ESR-1369, DATED MAY 1, 2016 or later). “Installation Instructions” can be found at www.GreenBayDecking.com. This warranty shall not cover defects due to (i) natural disasters, including fire, smoke, water, earthquake, lightning or static electricity; (ii) causes external to the GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck products such as, but not limited to, weather; (iii) the neglect, abuse, misuse (including faulty installation, repair or maintenance by other than Manufacturer), improper storage of the GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck products or other failure to comply with the instructions set forth in the “Installation and Care” section of www.GreenBayDecking.com or in documentation that may be provided with the GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck products; (iv) a modification of the GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™,

DuxxBak™, Indura Deck™, and OPTIMA®Deck products not provided by the Manufacturer; (v) a malfunction of any product not provided by Manufacturer with which the GeoDeck or TerrainDeck product is used or combined; (vi) use, modification or other treatment of the **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck** product in a manner for which it was not designed or intended; (vii) defects in articles purchased by Manufacturer and resold by it without alteration and effects in materials purchased by Manufacturer which cannot be discovered by warranty factory inspection; (viii) placement under or subjection to abnormal use conditions; (ix) normal wear and tear; or (x) expansion and contraction. This warranty does not cover product defects on installed decks that were apparent at or prior to installation.

MANUFACTURER'S WARRANTY SHALL APPLY ONLY TO **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck**. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR LABOR OR OTHER EXPENSES INCURRED BY THE PURCHASER, OR SPECIAL, INCIDENTAL, EXEMPLARY OR CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER. MANUFACTURER'S LIABILITY ARISING OUT OF THE MANUFACTURE, SALE OR SUPPLY OF THE **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck** PRODUCTS OR THEIR USE, WHETHER BASED UPON WARRANTY, CONTRACT, TORT, OR OTHERWISE, SHALL NOT EXCEED THE ACTUAL PURCHASE PRICE PAID BY THE PURCHASER FOR THE **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck**.

Purchaser acknowledges that the **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck** products are not structural lumber and therefore may not be used as such. PURCHASER IS SOLELY RESPONSIBLE FOR DETERMINING THE SUITABILITY FOR USE OR APPLICATION OF ANY **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck**, OR WHETHER **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck** PRODUCTS MEET REQUIREMENTS OF APPLICABLE BUILDING CODES OR SAFETY CODES FOR SPECIFIC APPLICATIONS.

No person or entity is authorized by Manufacturer to make and Manufacturer shall not be bound by any statement of representation as to the performance of **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck** other than what is contained in this warranty. This warranty shall not be amended or altered except in written instrument signed by Manufacturer and Purchaser.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTIES WITH RESPECT TO **GeoDeck™, TerrainDeck™, I.Dekk™, I.Dekk Terrain™, DuxxBak™, Indura Deck™, and OPTIMA®Deck**, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTY OR MERCHANTABILITY, FITNESS FOR A PARTICULAR PURCHASE OR NON-INFRINGEMENT: Laws from time to time in force in certain jurisdictions may imply warranties that cannot be excluded or can only be excluded to limited extent. This warranty shall be read and construed subject to any such statutory provisions. This warranty gives you specific legal rights. You may have other rights, which vary from state to state.

TRANSFER OF WARRANTY: A one-time transfer of this warranty may be made within the first five (5) years from the date on which the original warranty became effective. That transfer of warranty must be registered with a submittal of a copy of the ownership transfer document to Green Bay Decking, LLC, 1518 South Broadway, Green Bay WI 54304.

This warranty certificate is issued to:

Name: _____

Address: _____

Dated: _____, 20____

This GeoDeck, TerrainDeck, I.Dekk, I.Dekk Terrain, OPTIMA® and DuxxBak Lifetime Limited Warranty has been revised and becomes effective for sales made on or after **July 01, 2016**.