

RESIDENTIAL INSTALLATION GUIDELINES FOR MANGARIS® RED

Storage and Handling:

- Keep your MANGARIS® boards clean, dry and out of direct sunlight before installation and finishing.
- Allow the material to acclimate and stabilize to the local climate (4-7 days) prior to installation.

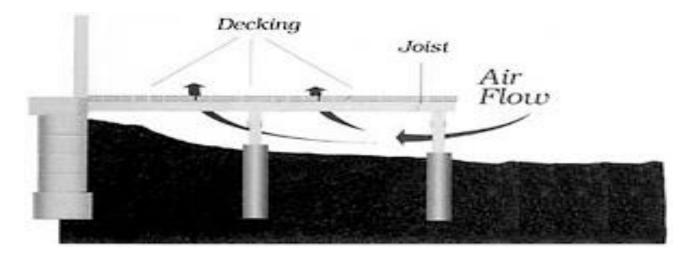
Allowable Decking spans:

| Board Size | Load (On Center Spacing) | | | | |
|-------------------|--------------------------|-------|--------|-----------|--|
| | 40psf | 60psf | 100psf | Recommend | |
| 1x4, 1x6 | 32" | 28" | 24" | 16" | |
| 5/4x6 | 42" | 38" | 32" | 24" | |

Note: Pls make sure you are following local building codes regulation.

Ventilation and Air Flow:

Allow adequate ventilation for proper air flow to reduce cupping potential. (See diagram)



- Install a vapor barrier to cover ground for decks with less than 24" ground clearance.
- Minimum recommended clearance is 12" with vapor barrier and proper ventilation.

Finishing:

- Reduce moisture "wicking". Seal all fresh cuts with Anchor Seal (liquid paraffin wax) available from Lumber Dealer.
- We recommend finishing MANGARIS® with deep penetrating oil, with ultraviolet inhibitors, on all four sides. A periodic light coat of finish will be required in order to maintain original color or allow to weather to a silver grey look (Read finishing instructions on can prior to coating)

Fasteners and Spacing:

- MANGARIS® deck boards are kiln dried. Unlike air dried boards shrinkage is very limited; however, excessive moisture may cause the boards to expand slightly.
- Recommended spacing is ¼" for 5-1/2" deck boards and 3/16" for 3-1/2" boards. Also allow ¼" from any structures such as foundations or rail post.
- Pre-drill Pilot holes ¾" from edges and ends and countersink for all screws using a minimum 2-1/2" #10 Fat head or Bugle head Stainless Steel screw. Coated deck screws may be used but could cause staining. Minimum screw penetration into joist of 1-1/2".
- When installing MANGARIS® hardwood decking, as with many other wood products, we recommend
 the use of a protective respiratory mask, gloves and eye protection. Wood dust may cause irritation
 and allergic effect.
- For technical or installation questions, call 1-866-901-DECK, 8AM 5PM Pacific Time.



MANGARIS™ RED Warranty

20 Year Limited Warranty

by **Tata Enterprises, Inc.(thereafter "Tata")**, a California Corporation with an office located at 2177 Harbor Bay Parkway, Alameda, CA.

When the installation guidelines are followed properly by installers (**excluding hidden fastener**) and homeowner should fill up the warranty card and attached with pictures that show the whole decking including underneath decking construction and send to Tata Enterprises, Inc.

Tata Enterprises, Inc. will replace all the material upon Tata Enterprises, Inc.'s investigation and approval as defect material. (Material only no labor)

Defect boards are:

- 1) Boards cupping more than standard tolerance of 1/8" if installed properly with the above guidelines.
- 2) Boards twisting more than standard tolerance of ¼" if installed properly with the above guidelines.
- 3) Boards showing face checking more than standard tolerance of 12" per check & tend to split if installed properly with the above guidelines.