



ZENTERRA™ ARCHITECTURAL SPECIFICATIONS

PART I .GENERAL CONDITIONS

1.01 BUILDING CONDITIONS

- A. The following conditions shall be satisfied before delivery, storage and handling of materials will be permitted to insure best product performance and to comply with the warranty.
1. Concrete subfloors on or below grade shall be adequately waterproofed beneath the slab and at the perimeter by the owner or general contractor, using a suitable membrane. Below grade slabs or an area with possible development of hydrostatic pressure shall be adequately waterproofed beneath the slab and on the earth side of the walls with a .000 grains per square foot (S.F.) per hour water vapor transmission rating.
 2. Permanent electrical power shall be available in the installation area with adequate lighting.
 3. All masonry, painting, plastering, tile work, marble, and terrazzo work shall have been completed for thirty days.
 4. The building shall be tight and dry, with all windows and doors installed.
 5. Concrete shall be cured for a minimum of sixty days prior to floor system installation.
 6. The general contractor shall furnish, install, and finish the concrete subfloors, depressing the slab sufficiently to accommodate the specified floor system, if the architect calls for the slab to be depressed. The slab shall be steel troweled to a true level and finished smooth and straight to a maximum tolerance of +/- 1/8" in any 10' radius. High spots shall be ground level and low spots filled with approved leveling compounds by the general contractor to the full approval of wood flooring contractor. This condition should be noted in the concrete specifications.
 7. Outside doors shall have waterproofed thresholds and drip caps.
 8. Heating, ventilation, and air conditioning shall be functioning properly in areas where materials are to be stored and installed to maintain no less than 60 degrees Fahrenheit temperature and no more than 80 degrees Fahrenheit temperature, and relative humidity to be maintained no less than 40% and no more than 70%, by the general contractor or owner.
 9. Adequate accessibility to the building for stocking and storing materials from tractor/trailer shipment shall be provided by the owner or general contractor.
 10. Areas of floor installation shall be broom cleaned and free of debris.
 11. After floors are complete, if general contractor or owner requires, he shall protect the floor by covering with a nonfibered red rosin paper or other suitable covering with joints taped until acceptance by owner of completed floor. At no time is the paper to be glued to the floor or have an abrasive surface which could damage the surface of the floor.

1.02 GUARANTEE

- A. The flooring system is warranted against manufacturing defects for one (1) year after the flooring has been installed and maintained according to written specifications. Full details of the limited warranty shall accompany submittals.

PART II . PRODUCT

2.01 MATERIALS

A. SYSTEM DEFINITIONS

1. **Zenterra:** Shall be defined as being constructed of 7/8" Prefinished Flooring, Installation Clips, and 3/4" Cushioning System.

B. CUSHIONING SYSTEM AND MOISTURE PROTECTION SHALL BE:

1. **Zenterra:** EXERAIRE® 3/4" air cushioning suspension system. Cushioning system is composed of three layers of closed-cell polyethylene foam, thermally laminated into 4'10" X 8' sheets.

C. PREFINISHED FLOORING SHALL BE:

1. 7/8" solid prefinished Mao Tzu bamboo flooring planks as manufactured by Sustainable Flooring. Floor assembly shall consist of four layers of horizontally oriented bamboo laminations, permanently glued, end matched, assembled and milled for tongue and grooved installation. Each floor board shall have a 5-1/16" X 76" dimension.
2. Each board shall be factory sanded, sealed, and finished with seven coats of two component pure polyurethane semi-gloss sport traction coating as manufactured by Friedrich Klumpp GmpH.
3. Bottom side of the flooring shall be sealed with two coats of factory applied polyurethane.
4. A minimum Janka hardness rating of 2109 psi based on ASTM D1037.

D. INSTALLATION CLIPS

1. EXERCLIPS® shall be used for fastening flooring boards together. EXERCLIPS® shall be made of heavy-duty spring tempered steel, placing tension on the flooring boards to allow for independent flexing of the boards.

E. PERIMETER MOLDING (OPTIONAL)

Any of the following three moldings may be used:

1. 2" x 4" sanitary type rubber base, color to be specified as black;
2. 3" x 4" ventilating type rubber base, color to be specified as black;
3. Wood base to be supplied and installed by owner or contractor.

F. THRESHOLD AND REDUCER STRIPS

1. Combination of wood and/or aluminum thresholds at doorways or reducer strips for transition from ZENTERRA™ floor to other flooring surfaces.

3.01 INSPECTION

A. INSPECTION OF CONCRETE SUBFLOOR FOR LEVEL TOLERANCES

1. If level tolerances are not satisfied, general contractor shall be responsible for grinding high spots or filling low spots to meet specified level tolerances.

B. Concrete shall be broom cleaned by general contractor or owner.

C. All conditions must be satisfied as noted in the General Conditions under Section 1.01 Building Conditions before installation shall begin.

4.01 INSTALLATION

A. PROCEDURE:

1. EXERAIRE® 4' 10" X 8' panels shall be installed parallel with the short dimension of the room. Panels shall be butted against the walls and each other, with the edges secured with duct tape. If ½" rolls are to be used, foam shall be unrolled along the short dimension of the room and cut in along the long dimension wall. These sheets shall be butted against the walls and each other, with the edges secured with duct tape.
2. Flooring boards shall not be unwrapped until time of installation. No acclimation is necessary unless the average relative humidity is less than 30%. The finished flooring shall be installed parallel to the long dimension of the room.
3. The arm of the clip shall be inserted into the groove on the underside of the board. Five clips per board shall be used having an approximate spacing of 16" on center. The free arm of the clip is to point in the same direction as the tongue of the boards, in other words, the laying direction.
4. Expansion gaps of a minimum of ½" shall be made on all sides of the flooring. Temporary blocks or wedges shall be placed between the flooring boards and the long dimension of the room. The long dimension wall at each end shall have an expansion gap of 1/2" or more, depending on the increased humidity level expected from the time of installation. At each end, or short dimension of the room, leave only an expansion gap of ½". If the wall surfaces are extremely rough, or there is no wall on one or more sides of the floor, continuous wood blocking must be installed.
5. Remove blocks and wedges from the long walls immediately after laying is finished. Moldings and thresholds can then be installed.
6. The second and subsequent rows of boards shall be at least 30" longer or shorter than the boards of the previous row to create a staggered effect. Install the clips in the boards as in the first row, making sure that the clips are staggered, as the boards will not install if two clips exactly line up.
7. Along vertical obstructions such as pipes, columns, etc., and expansion spacing shall be provided of a minimum of 1/2" on the long sides of the room only.
8. The last row of boards shall not have clips installed. The last row may require a cut to leave a 1/2" or greater expansion gap. Each board of the last row shall be glued to the adjacent floor board in the longitudinal direction in place of using a clip.

B. PERIMETER MOLDING

1. Install rubber base anchoring to the walls or other vertical surfaces with base cement, screws, nails or other type of anchors at intervals of 24' on center. Use premolded outside corners and neatly miter inside corners.

C. THRESHOLDS AND REDUCER STRIPS:

1. Install as needed at doorways and transition points.

D. CLEANUP WORK:

1. On completion of the flooring installation work, the flooring contractor shall remove any unused materials and shall clean up cut offs, sawdust and debris to be placed in a container provided by general contractor or owner.