

Section 13032
ARCHITECTURAL SPECIFICATIONS
FOR RACQUETBALL AND SQUASH COURTS

PART 1 – GENERAL

1.01 – Description

A. Scope:

Provide all labor, materials, and equipment necessary to complete the installation of prefabricated racquetball or squash court walls and ceilings. All work shall be completed in a professional manner, conforming to industry standards, including but not limited to the following:

1. Wall and ceiling panels and related steel stud framing and/or wood furring.
2. Glass walls – Stationary or Moveable.
3. Light Fixtures.
4. Doors and valuable storage compartments.
5. Floor system.
6. Floor finishing, game lines (and wall markings for squash courts).
7. Wallyball kits.

(Work Not Included)

- 1.1 HVAC components/grills.
- 1.2 Finish trim on corridor side of back walls, common wall cutouts or corridor side of courts.
- 1.3 Electrical wiring and connections to light fixtures.

1.02 – Quality Assurance

A. Supplier:

1. For purposes of establishing quality requirements, these specifications are based upon the Allied Products court panel system as supplied by Allied Products, LLC P.O. Box 1431, Sherwood, Oregon, USA 97140. Toll Free: 1-800-864-1272 Fax: 503-625-3748.
2. Panel tolerances for racquetball court panels shall comply with tolerances as published by United States Racquetball Association (USRA).
3. Panel tolerances for squash court panels shall comply with tolerances as published by the World Squash Federation (WSF).

B. Installer:

1. All work in conjunction with the racquetball and/or squash court walls and ceilings as indicated on the drawings and as specified herein shall be installed by one specialty contractor approved by the manufacturer.

1.03 - Submittals

- A. Samples: Submit samples of wall and ceiling panels.
- B. Brochures: Submit three copies of supplier's brochures.
- C. Shop Drawings: Submit in accordance with plans and specifications.

1.04 - Product Delivery, Storage and Handling

- A. No materials shall be delivered to the jobsite until building is completely enclosed and weathertight.
- B. Unloading and stocking materials into the court area to be the responsibility of the general contractor or owner unless otherwise arranged.
- C. It is critical to the acclimation of the flooring and panels that proper humidity and temperature be maintained in the court area. Therefore, the permanent HVAC shall be in operation and maintaining court area temperature between 50-80 degrees and 40%-60% humidity prior to and continuously after installation.
- D. Panels should never be subjected to direct sunlight, rain, or wide variations of ambient conditions.
- E. Store materials properly stacked in a clean, dry, storage area.
- F. Panels shall be stacked flat and delivered on skids. After delivery, panels shall have banding and wrap removed to allow panels to acclimate to room conditions.
- G. Material not properly protected and stored and which is defaced or damaged shall be rejected.

1.05 – Warranty

- A. Panel materials shall be warranted by the manufacturer for a period of ten years from date of installation against defects and delamination when installed in accordance with manufacturers specifications. Glass wall materials shall be warranted for a period of five years from date of installation. Installation workmanship and maple floor system is warranted for a period of one year from date of installation. Warranty applies only when materials are installed and environmental conditions are in compliance with manufacturers specifications.

PART – 2 PRODUCTS

2.01 – Materials

A. Steel Framing:

1. Racquetball Court Walls: 6" x 18 gauge steel galvanized C studs 12" O.C. for the front (main hit) walls and 16" O.C. for the side and rear walls.
2. Squash Court Walls: 6" x 18 gauge steel galvanized C studs 10" O.C. for the front (main hit) walls and 12" O.C. for the side and rear walls.
3. Ceilings: 6" x 16 gauge steel galvanized joists 16" O.C.

Note: 3-5/8" x 16 gauge steel galvanized C studs may be substituted at perimeter walls if bracing can be attached at ¼ points to exterior building wall or mezzanine deck support.

B. Wall Furring: (supported by masonry walls)

1. 3/4" - 1 1/2" x 20 gauge steel galvanized hat channel or Z furring spaced per 2.01 A 1 & 2.

Note: Masonry walls shall be furnished to racquetball court sub-contractor straight and plumb with a maximum variation of 1/8" in any 10' radius. Furring members shall be glued and mechanically attached with low velocity Hilti shots at 16" intervals. Exterior walls to be properly insulated and vapor proofed.

C. Panels:

1. Racquetball Courts:

- 1.1 Front (main hit) walls: 1-1/8" thick.
- 1.2 Side and rear walls: 7/8" thick.
- 1.3 Ceiling: 9/16" thick.

2. Squash Courts:

- 2.1 Front (main hit) walls: 1-1/8" thick.
- 2.2 Side and rear walls: 1-1/8" thick
- 2.3 Ceiling (optional): 9/16" thick.

3. Dimensions:

- 3.1 Panels shall be 4' x 8' and 4' x 4' installed in a staggered configuration.

4. Surface:

- 4.1 High-pressure plastic laminate with velvet texture finish (.050) thick with an average density of 85 lbs./cf.

5. Core:

- 5.1 Industrial grade high-density particleboard of nominal 55 lbs./cf and 45 lbs./cf density conforming to commercial standards.

D. Adhesive:

1. Rigid set glue conforming to Federal Specifications MMM-A-188. Attach panels to steel studs or furring strips with screws and B.F. Goodrich P.L. 400 or W.W Henry #217 heavy bodied structural adhesive.

E. Door:

1. Solid Core:

- 1.1 Shall be a 1-3/4" solid core wood door with full-length piano hinge and covered on both sides with plastic laminate to match court panels. SOSS hinges are not acceptable. Door size 36" x 80" with 10" x 10" view port.

2. Optional Glass Door:

- 2.1 Shall be ½" thick tempered glass. BOCA and FED Spec approved, to meet or exceed all industry standards.

F. Glass Wall Systems:

1. Complete glass wall systems, court doors, view windows and moveable glass walls as supplied by Allied Products, LLC. Supported by glass fins, aluminum L angle, aluminum posts, or aluminum tube frame. Conforming to Federal Specifications: DD-G-451C, DD-G-001403, ANSI Z97.1 – 1975, CPSC 16 CFR 1201. Heat soaked glass available upon request.

G. Lights:

1. Fluorescent fixtures by H.E. Williams with impact resistant prismatic glass lenses.
2. Metal Halide fixtures by ESCO with impact resistant prismatic glass lenses.

H. Floor:

1. Concrete sub-floor shall be furnished to the racquetball court sub-contractor broom-clean and steel troweled smooth and level with a maximum variation of 1/8" in any 10' radius. Any leveling required to meet this tolerance shall be the responsibility of the general contractor or owner.
2. Flooring shall be MFMA hard maple standard T&G strip flooring, 25/32" x 2-1/4".
3. Grades available are 1st grade, 2nd & Better or 3rd grade.
4. Wood flooring may be Woodlife F treated when specified.
5. Vapor barrier shall be 6-mil polyethylene.
6. Sleepers shall be spruce, pine or fir, nominal size 2" x 3" x 4' surfaced to uniform thickness, kiln dried, and Woodlife treated, each with five 3/8" thick rubber pads. Sleepers to be installed end to end in rows 9" O.C. in a staggered configuration at right angles to the intended direction of the finished flooring with end joints overlapping 24".
7. Flooring fasteners shall be 2" cleats or 2" staples.
8. Gap of 1/2" between floor and sidewall panels to be left for air circulation and floor expansion.
9. Floor to be sanded with a drum sander using coarse, medium and fine sandpaper. Vacuum or tack floor before first coat of finish.
10. Apply urethane finish per manufacturers specifications.
11. Paint game lines per regulations.

I. Accessories:

1. Valuables storage compartment to be flush mounted in the sidewall of the court.
2. Wallyball Kit – includes ball, net, mounting hardware and rulebook.

PART – 3 EXECUTION

3.01 – Inspection

- A. Inspect court area to ensure conditions as set forth in these specifications have been adhered to.
- B. Inspect concrete sub-floors and masonry walls for proper tolerance and dryness. Discrepancies should be reported to the general contractor and architect in writing. Correction of such is the responsibility of others.
- C. Masonry walls shall be free of protruding mortar by masonry contractor.

3.02 – Installation

- A. Install courts per construction documents, utilizing qualified personnel experienced in the construction of similar projects.
- B. Install metal studs and/or furring in width and spacing in locations as shown on plans. Studs shall be plumb with corners square. Wipe any oil/dirt off surface of steel studs or furring strips. Each stud/furring strip shall receive a ribbon of construction adhesive the full width of the panel.
- C. Clean up all debris caused by work in this section and remove to onsite dumpster provided by general contractor or owner.