



Section 13032 ARCHITECTURAL SPECIFICATIONS – RACQUETBALL & SQUASH COURTS

Part 1 – GENERAL

1.01 – Description

A. Scope:

Provide all labor, materials, and equipment necessary to complete the installation of prefabricated racquetball and/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 & ceiling panels and related steel stud framing and/or wood or metal furring.
2. Glass walls – Fixed or moveable
3. Doors and valuable storage compartments
4. Light fixtures
5. Floor system including finish and game lines (wall marking for squash courts)
6. Wallyball kits
7. Shop drawings and any required samples
(Work Not Included)
 - 1.1 Slab leveling or repair
 - 1.2 Finish trim to exterior side of courts
 - 1.3 HVAC grills/components
 - 1.4 Electrical wiring and hookup of lights

1.02 – Quality Assurance

A. Supplier:

1. For purposes of establishing quality requirements, these specifications are based on the Sports Unlimited court panel system manufactured by Fiberesin Industries as supplied by Sports Unlimited, Inc., P.O. Box 1207, Stillwater, OK 74076. Toll Free 1-800-654-6810. Fax: 405-624-1000. www.sucourts.com. Consideration will be given by the Architect to other systems if, in his/her opinion, it is of equal quality. Submit information on products for approval at least ten days prior to bid date.
2. Panel tolerances for racquetball court panels shall comply with tolerances as published by the 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 Sports Unlimited and 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 weather-tight. .
- 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 panels and flooring that proper humidity and temperature be maintained in the court area. The permanent HVAC system must be fully operational and maintaining court area temperature of 50-80 degrees and 40-60% humidity prior to and continuously after installation.
- D. Store materials properly stacked in a clean, dry storage area.
- E. Court panels should never be subjected to direct sunlight, rain, or wide variations of ambient conditions.
- F. Court 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 (10) years from date of installation against defects when installed in accordance with manufacturers specifications. Glass wall materials shall be warranted for a period of five (5) years and floor materials, installation and workmanship are warranted for a period of one (1) year from date of installation. Warranty for panels and flooring applies only when materials are installed and environmental conditions are in compliance with manufacturer's (P 1.04 C) specifications, i.e., temperature and humidity levels are met and maintained on a permanent basis.

Part 2 – Products

2.01 – Materials

- A. Steel Framing: All steel members to meet AISI spec, ASTM A466, Grade A
 - 1. Racquetball and Squash Court Walls: 6"x18 ga. galvanized C studs 12" O.C. for front walls (hit wall) and 16" O.C. for side and rear walls.
 - 2. Ceilings: 6"x16 ga. steel galvanized joists 16" O.C.
 Note: 3-5/8"x16 gauge 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. 7/8"x18 gauge steel galvanized hat channel or Z furring spaced per 2.01 A 1&2.
 Note: Masonry walls shall be furnished to racquetball court installer 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 shall be properly insulated and vapor proofed.

- C. Panels:
 - 1. Racquetball Courts:
 - 1.1 Front (hit) walls: 1-1/8"x48"x96"/48", 55#/cf M-3
 - 1.2 Side and rear walls: 13/16"x48"x96"/48" 55#/cf M-3
 - 1.3 Ceiling: 5/8"x48"x96" 45#/cf
 - 2. Squash Courts:
 - 2.1 Front (hit) walls: 1-1/2" thick to meet WSF specifications
 - 2.2 Side and rear walls: 1-1/8" thick to meet WSF specifications
 - 2.3 Ceilings (optional): 5/8" thick
 - 3. Dimensions:
 - 3.1 Panels shall be 4'x8' and 4'x4' installed in a staggered configuration.
 - 4. Surface and Core:
 - 4.1 Proprietary Fiberresin high pressure hot pressed and fused layered melamine and phenolic buildup fused to high strength particle board meeting all test results of Fed. Spec's L-T-0041C (GSA-FSS type III)

- D. Panel attachment:
- 1.1 H-spline and alignment spline, PL400 construction adhesive, 0.10"x32" shims and 1/2" low profile S-12 screws. Tongue & groove methods of attachment are not acceptable.
- F. Adhesive:
- 1.1 Rigid set glue conforming to Federal Specifications MMM-A-188. Attach panel with B.F. Goodrich PL400 or W.W. Henry #217 heavy bodied structural adhesive.
- G. Door:
1. Solid Core:
 - 1.1 Fiberesin 1-1/2" solid panel frame and door with 13/16" stop; edges lacquered. Full piano hinges, 2-1/2" x 3-5/8" pull ring, 1/2" x10"x10" "Lexan" window and black laminate push plate. Model CF Door size: 36-7/8"x79-1/4". Jamb size 40-1/4"x82-1/2".
 2. Optional Glass Door:
 - 2.1 Shall be A-Best Doubleplay 1/2" tempered glass door prehung in a powdered coated aluminum frame. BOCA and FED Spec approved, to meet or exceed all industry standards.
- H. Glass Wall System:
1. Doubleplay fixed glass wall systems, court doors, view windows, railings and moveable glass walls as manufactured by A Best Enterprises and supplied and installed by Sports Unlimited. All glass shall be 1/2" (12mm) tempered and tested in compliance with IBC 2000, Section 2408 and meets 16 CFT 1201 C-11.
 2. Fittings: Glass connection fittings shall be of extruded aluminum, powder coated a brilliant white. Other colors available upon request.
 3. Base Angles: Made of structural aluminum, powdered coated a brilliant white.
 4. Door hardware: Doors shall be locked by means of a positive locking system, with a knob set on the exterior and flush ring pull on the interior. Lock housings shall be powdered coated a brilliant white. Wrap-around side mounted hinges to be used on all wall installations. Door knob and latch assembly is warranted for 1 years from date of delivery to customer under normal use and service.
 5. Anchor bolts: 1/2"x3-1/2" (13mmx89mm).
 6. Fasteners through glass: Stainless steel
 7. Countersinks: Nylon, white in color
 8. Aluminum channels: 1"x1"x1/8" powdered coated a brilliant white
 9. Aluminum angles: 2-1/2"x2-1/2"x1/8" (64mmx64mmx3mm).
 10. Aluminum tubular posts: 1-3/4"x4"x1/8" (44mmx102mmx3mm). Powdered coated a brilliant white.
 11. Polypropylene gaskets: Placed between all fittings and glass. No glass to glass metal contact will be allowed and nylon hinges and fasteners are not acceptable.
- I. Lights:
1. Fluorescent fixtures by H.E. Williams Series 50 with impact resistant prismatic glass lenses
 2. Metal Halide Sport Houston Series 400-Watt Metal Halide by Abolite (a subsidiary of LSI Industries) with impact resistant prismatic glass lenses.
- J. Floor:
1. Concrete sub-floor shall be furnished to the racquetball court subcontractor broom-clean and finished smooth, straight and level to where minimum tolerance is +/- 1/8" in a ten (10) foot radius. All leveling to be done by General Contractor i.e., high spots shall be ground level and low spots filled in with approved leveling compound by the GC to the full approval of the installer.
 2. Flooring shall be MFMA hard maple standard T&G strip flooring, 25/32", 2-1/4".
 3. Grades available are 1st grade, 2nd & better or 3rd grade.
 4. Vapor barrier shall be 6-mil polyethylene.
 5. Sleepers shall be spruce, pine or fir, nominal size 2"x3"x4' 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".

6. Flooring fasteners shall be 2" cleats or 2" staples.
7. Gap of 1/2" between floor and sidewalls panels to be left for circulation and floor expansion.
8. Floor to be sanded with a drum sander using coarse, medium and fine sandpaper. Vacuum or tack floor before first coat of finish.
9. Apply urethane seal and finish per manufacturers specifications.
10. Paint game lines per regulations.

NOTE: Squash floors are sanded only. Drum sand to a 40-grit finish leaving a nap finish. Sweep for vacuum floors clean. Allow a 3/8" nick (gap) at perimeter to floor junction. Flooring must be butted to walls and not run under the walls to maintain proper expansion nick.

K. Accessories:

1. Valuable storage compartment (Fiberesin Safe-keeper) to be flush mounted in the sidewall of the court.
2. Wallyball kit – includes ball, net and mounting hardware.

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.
- D. Wipe down and clean wall panels and glass walls prior to final departure from jobsite. The final cleaning before the building is turned over to the client is the responsibility of others.