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# RACQUETBALL, HANDBALL OR SQUASH COURTS AND GYMNASIUM WALL SURFACES

# <u>Fiberesin Wall System</u>

Provide materials and labor to complete courts as specified utilizing Fiberesin - 1 1/2" – High density M-3 panel, or 1 1/8" High density M-3 panel - for front walls and 1 1/8" – 55# M-2 panel or 13/16" High density M-3 panel (M-2 panel available) - for sidewalls. Their even plane, uniformed textured nonskid surface ensures consistent, predictable rebounds. Fiberesin Hi-Density wall panels are accredited by the World Squash Federation, guaranteeing that they meet the WSF high technical standards.

#### <u> Part 1 - General</u>

- 1.1 Description
  - A. The information herein details a High-Density, pre-fabricated wall system suitable for Racquetball, handball or squash courts and gymnasium wall surfaces.
  - B. The general contractor shall provide steel or wood support framing to a tolerance of plus or minus 1/8" in 10'0" of plumb and straight, subject to approval by the panel installation contractor. Moisture barriers must be adequate for conditions.
  - C. Provide all labor, equipment and materials to finish and completely install the Fiberesin panel system as called for in the drawings.
- 1.2 Quality Assurance
  - A. All system components must be supplied by Fiberesin Industries of Oconomowoc, Wisconsin and Anderson Courts and Sports Surfaces, Inc. of Buffalo, New York.
  - B. The panel installer shall be trained and certified by Anderson Courts and Sports Surfaces, Inc. with at least 5 years of experience
- 1.3 Working Conditions
  - A. The panel system shall not be installed until all masonry, plastering and drywall work is complete and overhead mechanical trades and painters have finished in the area. The building must be reasonably dry; all openings closed in; permanent

heating and air conditioning installed and working before, during and after installation.

B. The area shall be dry, free of foreign materials and turned over to the panel installer broom clean. Moderate room temperature of 65° or more shall be maintained a week preceding and throughout the duration of the work.

### 1.4 Warranty

- A. Fiberesin Industries warrants the panels it ships to be free of defects in material and workmanship and from delamination for a period of ten (10) years. Anderson Courts and Sports Surfaces, Inc. warrant the materials it ships and installation to be free of defects in material and workmanship for a period of one (1) year. The exclusive remedy under this warranty shall be replacement of defective materials supplied by Fiberesin Industries/Anderson Courts and Sports Surfaces, Inc., or correction of defective installation. All implied warranties of merchantability or fitness for intended use are limited to the period of this warranty. This warranty excludes consequential damages.
- B. This warranty does not cover damage caused by fire, winds, floods, chemicals or other abuse or by failure of other contractors to adhere to specifications, or neglect of reasonable precaution to provide ventilation during hot and humid weather. This warranty also excludes damage due to excessive dryness or excessive moisture from humidity, spillage, migration through the slab or wall or any other source. This warranty also excludes damage to the panels due to ordinary wear and tear, faulty construction of the building (other than the panel installation), separation of the concrete slab or settlement of the wall framing or substrates.

# Part 2 - Products

- 2.1 Manufacturer
  - A. The wall system shall be fabricated and installed in conformity with the designs and approved shop drawings prepared by Anderson Courts and Sports Surfaces, Inc...

B. Manufacturer shall be Fiberesin Industries as represented by Anderson Courts and Sports Surfaces, Inc...

C. Wall system must conform to WSF requirements or governing body requirements having jurisdiction. Any system not conforming to WSF specifications or those of the applicable governing body will not be acceptable.

# 2.1 Framing - by General Contractor

Note: All steel members to meet AISI spec., ASTM A466, Grade A.

# A. Wall Framing

1. Wall Framing - 18 ga. x 6" galvanized C - studs spaced 12" o.c. for head walls and 16" o.c. for other walls .Walls should be stiffened with horizontal stiffener

at 5' centers .  $3\frac{1}{2}$ " or  $3\frac{5}{8}$ " studs may be substituted when attached to structure at  $\frac{1}{4}$  points for added rigidity. Stud layout pattern supplied by the court installer must be followed. Vapor barrier exterior, wet area and certain masonry or poured walls. Note: Vapor barrier must be behind surface attachment point for Fiberesin.

- 2. Wall Furring Channels on masonry walls 18 ga. galvanized furring or Z channels spaced as above. Stud layout pattern supplied by the court installer must be followed. Substantial attachment of metal firring is mandatory so that all fasteners are secure and the firring is attached to the wall at 16" centers. Loose firring will not be accepted. Attachment via suitable mechanical fasteners supplemented by construction adhesive. Note: Vapor barrier must be behind surface attachment point for Fiberesin.
- 3. Construction grade lumber of equal strength may be substituted for steel. Attachment conditions apply.

#### B. Ceiling Framing - racquetball

1. Joists - 16 ga. x 6" galvanized C - joists spaced 16" o.c...

2. Suspended - 1 -  $\frac{1}{2}$ " c.r. channels and drywall furring channel attached 16" o.c. or direct screw grid.

3. Concealed Grid - National Rolling Mills MI 6000 series or equal wire suspended.

4. Construction grade lumber may be substituted.

# C. Substrates behind playing surfaces – Optional (but highly recommended by Anderson Courts & Sports Surfaces)

1. Insulation - Insulate stud cavities for sound attenuation with fiberglass batt insulation. Insulate Z-channel firring with foam insulation.

2. Install 5/8" fir plywood on studs behind playing surface of court. Securely fasten substrate to framing with appropriate fasteners on 8" centers, being sure to set all fasteners. Remove all surface contaminants.

3. Install 5/8" Type x drywall on studs behind playing surface of court. Securely fasten substrate to framing with appropriate fasteners on 8" centers. Single coat seams to provide a reasonably flat surface. Do not sand. Remove all surface contaminants.

#### 2.3 Panels

Fiberesin panels with High density M-3 panel (front walls), High density M-3 panel or M-2 Panel (side and rear walls) and 46#/CF (ceiling) average composite densities.

A. Panel specifications required (average values)

- 1. Melamine laminate faces and back thermally fused to high strength particle board, meeting all test results of Fed. Spec.'s L-T-0041C (GSA FSS type III)
- 2. Stain pass NEMA LD 3.1 95

		<u>Thickness</u> 1 - 1/8"	13/16"
3.	Screw holding - ASTM D - 1037 Face	450#	450#
4.	<ul> <li>Mechanical properties - internal bond</li> <li>modulus of rupture</li> <li>modulus of elasticity</li> </ul>	145PSI 3408PSI 398,900 PSI	145PSI 3408PSI 398,900 PSI
5.	Impact (NEMA LD 3.1 - 95)	52"	52"

- 6. Dimensional change 0.4% in 90°F 90% r.h. for 60 days.
- 7. Abrasion (NEMA LD 3.1 80) 2500 cycles.
- 8. Flame spread for 1 1/8" M-3 panel (ASTM E84 procedure) flame spread 90, fuel contributed 105, smoke density 200.
- C. Description
  - 1. Wall and ceiling panels are specified composite density particle board core thermally fused between melamine laminate face and back with white texture finish on the face.
  - 2. Front walls 1 1/2" (WSF approved) or 1 1/8" x 48" x 96" High density M-3 panel, +/- 5% density; high solids modified acrylic edge finish. Precut panels will be dimensionally true plus or minus 1/16".
  - Side and rear walls 1 1/8" (WSF approved ), High density M-2 panel or 13/16" High density M-3 panel +/- 5% density by 48" x 96"; with high solids modified acrylic finish. Precut panels will be dimensionally true plus or minus 1/16".
  - 4. Ceiling panels 5/8" or 3/4" x 48" x 96" or 24" x 48", 46#/CF +/- 5% density with 45#/CF density core. Pre cut panels will be dimensionally true plus or minus 1/16".
  - 5. Doors 1 1/2" solid Fiberesin panel frame and door with 13/16" stops, edges lacquered. Full piano hinges, 4 <sup>1</sup>/<sub>4</sub>" dia. pull ring, <sup>1</sup>/<sub>2</sub>" x 10" x 10" "Lexan" window and black laminate push plate.

Model CF Door size - 36 7/8" x 79 <sup>1</sup>/<sub>4</sub>" Jamb size - 40 <sup>1</sup>/<sub>4</sub>" x 82 <sup>1</sup>/<sub>2</sub>"

 Safe keeper (Racquetball only) - wall panel stock, "Lexan" door, piano hinge and magnetic catch. Model SK - 01 Size - 14 <sup>1</sup>/<sub>2</sub>" x 6" x 8"

- Panels attach H-spline, construction adhesive and <sup>1</sup>/<sub>2</sub>" low profile s -12 screws.
- 8. View panels or walls see Ellis Pearson Glass Wall specification.
- 9. Floors see Anderson Interflex specifications.

#### Part 3 - Execution

- 3.1 Inspection
  - A. Inspect framing and substrates for proper tolerances reporting any discrepancies in writing to general contractor.
  - B. All work required to put the framing or substrates in acceptable condition shall be the responsibility of the general contractor.
  - C. The area shall be turned over broom clean to the panel installer.

#### 3.2 Installation

- A. By General Contractor -Erect framing (if specified) per plans, shop drawings and specifications. Dimensions, attachments and vapor barrier requirements are critical.
- B. By General Contractor Insulate and substrate (plywood or drywall) as required.
- C. By General Contractor Light fixtures
- D. By Court Contractor Apply panels and door units per manufacturer's instructions and drawings using H-spline and construction adhesive at each stud.
- E. By Court Contractor View panels, glass walls, floors and accessories (if specified) shall be installed per manufacturer's specifications.
- 3.3 Clean up
  - A. Clean up all unused material and debris and remove from premises. Wipe down walls and ceilings as required.
  - B. Protection of erected walls and final cleaning is by others.
- 3.4 Maintenance
  - A. Upon completion of panel installation, the owners, attendants or individuals in charge and responsible for upkeep of the building are to see that the care and maintenance instructions of Anderson Courts are followed. Failure to do so may void warranty.