

SPECIFICATIONS

GENERAL: The work under this section shall be furnished and/or furnished and erected in conformity with the general conditions, special conditions, including modifications and governing contract documents.

WORK INCLUDED:

1. Furnish, deliver and erect all Prestressed floor and roof slabs.
2. If purchaser elects to do own erection, StresCore, Inc. reserves the right to direct and inspect the erection and grouting.
3. Furnish and install weld plates, headers, as required per shop drawings.
4. Grouting of the joints with 3:1 sand/cement mix design shall be done by the erector in a workmanlike manner.
5. Submit shop drawings to the Architect for approval, showing setting plan, reinforcing details.
6. The furnishing of openings greater than 6" in diameter, as shown on plans.

WORK NOT INCLUDED:

1. Caulking joints in finished ceiling area as required.
2. Concrete topping
3. Concrete for lintels at wall connections.
4. Forming, shoring and miscellaneous supports.
5. Hangers for piping, conduit, etc.
6. Mechanical openings less than 6" in diameter.

MATERIALS AND FABRICATION:

Floor and roof slabs shall be COREFLOOR as manufactured by StresCore Inc., of South Bend, Indiana.

MATERIALS USED IN THE MANUFACTURE OF COREFLOOR SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

1. All concrete materials shall be clean and properly graded. The concrete shall have a minimum compressive strength of 3500 PSI at release of prestress strands and 6500 PSI at 28 days.
2. Prestressing strands shall be uncoated, 7 wire low relaxation conforming to A.S.T.M. C-416

3. Portland Cement A.S.T.M. C-150.
4. Concrete Aggregates A.S.T.M. C-33.
5. Curing of slabs shall be by a method suitable to obtain uniformity of color and strength. The strength shall be as specified under item (1).
6. Slabs shall be 48" x 6", with 8-4" dia. cores, 48" x 8", with 6-6" dia. cores, 48" x 10", with 5-7½" dia. cores or 48" x 12", with 4-9⁹/₁₆" dia. cores in each slab and prestressed to sustain the superimposed loads as indicated on the drawings. In general the design of the slabs shall conform to ACI 318-89.

ERECTION AND INSTALLATION:

1. Erection shall be carried out by experienced workman under competent supervision.
2. Bearing surface shall be prepared by others true to a level line. Minimum recommended bearing is 3" on masonry or concrete, and 2½" on structural steel.
3. Installation of the slabs shall be made by leveling the floor and roof units in a workmanlike manner, keeping the units tight and at right angles to the bearing walls.
4. ½" Ethafoam rope shall be placed in the bottom of the grout joint. The rope shall be placed securely so as not to permit grout to seep through the joint.
5. Slabs shall be grouted by a 1:3 cement-sand mix with proper care taken to see that the joints are properly filled. Grout requirements: 1 cubic yard per 2500 square feet.
6. Welding shall be done by experienced welders to fulfill the details shown on the drawings.

TOLERANCES:

1. Length $\pm\frac{1}{2}$ "
2. Cross section dimensions $\pm\frac{1}{4}$ "
3. Weld plates and inserts ± 1 "
4. Openings $\pm 1\frac{1}{2}$ "
5. Squareness $\pm\frac{1}{2}$ "
6. Differential camber of units of like design less than $\frac{1}{4}$ " per 10'-0", but not greater than $\frac{1}{2}$ ".
7. Finish: Normal plant run finish. Small surface holes caused by air bubbles, minor chips and spalls will be tolerated.