

ROOFING, SHEET METAL WORK, WATERPROOFING AND DAMPPROOFING.APPLICATION OF GENERAL CONDITIONS:

All of the works described herein are subject to the foregoing General Conditions, these General Conditions becoming a part of this specification and all work shall be carried on in accordance therewith.

WORK INCLUDED:

This contractor shall furnish all labor and material necessary to complete all roofing, including all flashing and counterflashing; All ventilators and louvres on roofs; all metal covered woodwork; and kalesomined work, all skylights, including glass, all waterproofing and dampproofing of concrete slab and walls below grade and any and all sheet metal work herein specified or shown on the drawings for entire building, including terraces, whether herein specifically mentioned or not.

This contractor shall see that work done by himself, and work done by other contractors, in connection with roofs and parts pertaining there to is so done as to make all roofs absolutely water and weather tight.

MATERIALS:

Materials to be used throughout building shall be as follows, except as otherwise specified;

All sheet metal shall be Armco Iron, heavily and uniformly galvanized.

All gal. iron shall be #26 except the feed chute which shall be #22. All counterflashing and coping shall be crimped except where shown copper/

All copper shall be 16 oz. either soft or hard, as is best suited for each particular use.

All roofing shall be a 20 year guarantee build up roofing of approved make.

All asphalt shall be "Petro Clastic", "TENAS", "Viskalt", or approved asphalt, with penetration of between 25 and 30, and boiling point of not less than 180 degrees.

All glass for skylights shall be $\frac{1}{2}$ " wire rib glass.

All roof drain, except otherwise shown shall be "Josam" roof drain set by the plumbing contractor.

WORKMANSHIP:

The workmanship of all work under this contract shall be of the highest grade. All joinings of sheet metal shall be double locked, riveted and soldered together, and no acid flux shall be used. Due allowance must be given in all work for expansion and contraction. Wherever necessary to secure sheet metal by nailing, the nails shall be galvanized and shall have large heads. Holes for nails shall be punched larger than size of nail so as to allow for play, and all nail heads shall be capped. Ribbed seams of copper roof shall be formed over wood strips placed by carpenter, copper shall be brought up to top of strip and securely attached to same with cleats spaced not over

12" apart. Cap of ribs shall be locked to field sheets and joints flattened to a true straight line. Metal finished into raglets shall be broken at right angle, fastened solidly and raglets filled full with
GUTTERS: "Pecora" caulking compound, or approved.

Gutters shall be lined with copper all as shown. Pitch same to drain and bring vertical metal up into raglets or under roofing ~~at xxxx~~ as shown. All seams shall be locked together and well soldered and gutters shall be straight and true. Fill all raglets with "Pecora" caulking compound, or approved.
ROOF VENTILATORS:

This contractor shall furnish and install any and all ventilators shown on drawings. Ventilators shall be Golbe, star or approved, and shall be of size shown.

SKYLIGHTS:

Build all skylights of metal, as shown. Details for same shall be submitted to the architect for approval, and this contractor shall furnish and set $\frac{1}{4}$ " wire rib glass for same. Glass shall be bedded and puttied with "Kuhl's", Pecora, or approved elastic glazing composition, and skylights shall be guaranteed to safely withstand a load of not less than 40# to the square foot without deflection.

ROOF DRAINS:

Plumber contractor shall install Jossam roof drains where shown, this contractor shall connect roofing into same flashing and counterflashing as necessary.

ROOFING:

All roofing except metal roof shall be 20 years guarantee build up roof, Johns Manville, or approved, laid according to manufacturers specifications.

COPPER ROOF:

Metal roof wherever shown on plans, or specified metal shall be made of 16 oz. copper laid as shown with flat or standing seams.

FLASHINGS & COUNTERFLASHINGS:

Flash and counterflash with copper all parapet walls from gutter to upper roof. Flash and counterflash with G. I. curbs of skylight etc., all as shown and directed.

The bottom edge of flashing to be broken at a right angle and extend out on the roof not less than four inches (4") and up on the top of walls. The counterflashing to be extended down not less than four inches (4") over flashing. Counterflashing to be attached to wall every two feet with nails driven into wooden plugs in wall, and neils to be capped.

Scuttles of roof shall be covered with galvanized iron by this contractor, well lapped and soldered at every joint.
~~xxxx xxxxxx xxxixixix in xxxxx xxxxxx to be xxxxxxx with xxx.~~
~~xxxx on xxx xxxxx of xxxfixx fixx.~~

METAL COVERED DOORS:

Cover with metal, doors and frames in fan rooms, doors and frame of wood lift and dumbwaiter, or wherever shown or called for, Metal shall be stretched smooth, and joints well made.

No soldering shall show on face and no joints shall be made on edges of doors. Wood doors shall be furnished by carpenter contractor. All metal covered work shall comply with underwriter's rule.

CHUTE COVERING:

The floor of fuel chute shall be lined with #22 G. I. use long lengths of metal and make only one joint at lowest point of chute. Carpenter shall provide the wood lining under metal. Metal shall be securely attached to side walls and joints shall be locked and made as smooth as possible.

KALAMEINED WORK & METAL FRAMES & SASH:

Elev. doors and All the exterior entrance doors and transoms, excepting the main entrance doors shall be kalameined both side with 16 oz. copper use 14 oz. for mouldings.

All doors and transoms to be of sizes and style shown on plans and schedule.

Stiles, cross rails and muntins of doors shall have the copper drawn skin tight over the wood through a close die with clincher edges. The metal for wide rails or panels shall be cemented on wood, with waterproof cement, under heavy pressure, leaving in press until cement is thoroughly set.

After doors are covered, they are to be thoroughly glued together using at least three dowels at each joint of cross rails.

All work to be left shain tight and free from buckles. No nailing to be done through exposed surface, except where necessary to fasten mouldings.

This contractor shall hang doors and transoms, and set all hardware in connection with all kalameined doors. After doors are hung and finished. When so directed by the architect, this contractor shall clean copper with a solution of acid.

CLEANING & PAINTING:

When all work has been completed, the contractor shall clean all of the sheet copper surfaces and give one coat of boiled linseed oil, except where other finish is called for.

The exposed surfaces of all galvanized iron, and under side of all G. I. flashings and counterflashings, shall be painted one coat of paint by this contractor. Paint to be of pure metallic pigment, mixed with pure linseed oil. No patent dryers or turpentine to be used. Paint to be applied with a hand brush and well rubbed on. Before painting, care must be taken to properly prepare the surface, by washing and brushing with a solution of ammonia water, to insure adhesion of the paint.

WATERPROOFING & DAMPROOFING:

Dampproof the top of concrete base under all wood floors in basement, extending up on wall 4", with one heavy coat of asphalt, applied hot in which one layer of #14 felt shall be imbedded, and then re-coat with another heavy coat of hot asphalt.

Waterproof the exterior of all outside walls of building and the interior of all terraced wall, from footings to eight inches above grade with two heavy coats of Toch Bros. R. I. W. "marine cement", "Plasterite" or approved waterproofing compound, applied with a spray pump all concrete surfaces shall be thoroughly cleaned and dried before applying waterproofing.

Membrane waterproofing: Waterproof the top of Concrete slab of dome, including flat portions, the top of Loggias concrete slab and the top of concrete slab outside of bldg. walls, forming ceiling of Soda Fountain room with two layers of heavy fabric embedded and heavily coated with hot asphalt. Fabric shall meet the approval of the architect.

All membrane waterproofing shall turn up against and down over exterior at least 6" all as directed.

GUARANTEE:

This contractor must furnish a written guarantee that all roofs, flashings counterflashings, metal work, etc., all waterproofing and dampproofing, and any and all work furnished by or installed by him, shall be satisfactory and watertight for a period of five years after the completion of the same.

CUTTING & PATCHING:

This contractor shall do all necessary cutting, altering, patching, etc., of his work necessary for all other trades. All cutting to be done in a careful manner, and all is to be patched and repaired in a thorough and workmanlike manner.

Leave the whole in first class condition on completion of the work, and entirely to the satisfaction of the architect.

PROTECTION:

Build all necessary guards and protection for all work to protect same from damage by workmen or other contractors, until the entire building is completed.

Lay plank for other workmen to work or walk on.

This contractor will be responsible for any damage done to his work by any means and in any manner and he must protect it against all such damage and must repair and make good any and all damage done to his work until finally accepted.