

## Program – Roof Alt 1

A schematic plan of an office building has been prepared for a private client. The following requirements must be considered in preparation of the roof plan.

### GENERAL

1. The building consists of two volumes, one high and one low. Each volume has a roof height and slope requirement.

### ROOF DRAINAGE

1. The building is located in a temperate climate with moderate annual rainfall.
2. Only roof slope, gutters, and downspouts are to be used for removal of rainwater.
3. Downspouts should not conflict with any door, window, or clerestory window.
4. Rainwater should not discharge from the edge of an upper roof directly onto a lower roof or from any roof or gutter directly onto the ground.

### CONSTRUCTION

1. Finished floor elevation is 0'-0". Minimum ceiling height is 9'-6".
2. All roof areas must have a positive slope.
3. The roof over the lobby and registration/ reception hall shall have a slope between 5:12 and 8:12.
  - The roof and structural assembly is a total of 24 inches thick.
4. The roof over the remainder of the building shall have a slope between 3:12 and 5:12.
  - The roof and structural assembly is a total of 24 inches thick.
5. The registration/ reception hall is to have a continuous horizontal clerestory window 34 inches in height located in the existing east wall.
  - The clerestory sill is included in the overall height dimension.
6. Natural light must be provided for all rooms by means of windows, clerestory window, or skylight.
  - Skylights must be provided only where no windows are shown and no clerestory window has been specified.
  - Skylights are not required in corridors, foyer, storage rooms, dressing or closets.
  - Provide an additional skylight at Sajjad's Office.
7. Flashing must be provided at all roof/wall surface intersections, including chimneys.
  - HVAC condensing units, plumbing vent stacks, exhaust fan vents, skylights, and gutters are self-flashing and require no additional flashing or crickets.

## **MECHANICAL**

1. The HVAC condensing unit must be placed on a roof with a slope of 3:12 or less.
  - Maintain a minimum of 2'-6 ft clearance from all roof edges.
  - Do not place in front of the clerestory window.
2. Provide one (1) exhaust fan vent for each toilet room. In addition, provide one exhaust fan vent for the kitchenette.
3. Provide plumbing vent stacks through roof where required to vent plumbing fixtures.
  - Plumbing vent stack for toilet adjacent to Sajjad's Office can have a reasonable offset at roof.

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