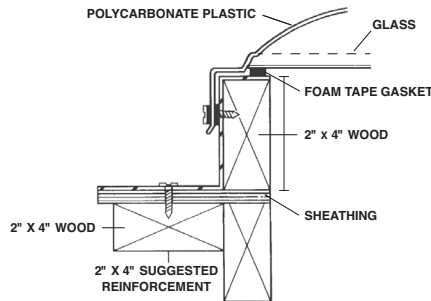


## SFAW Horizontal Cross Section:



## Important Precautions:

Skylights are subject to condensation caused by warm moist air rising from the room below. Insulate the light shaft and other areas surrounding skylight to minimize condensation. In some cases, light shaft may require special ventilators to remove moist air.

- To prevent roof failure and possible injury, be sure skylight remains adequately supported by roof if either headers or rafters are setback from edge of the rough opening.

## Important Warnings:

- Do not cut roof trusses. If trusses must be cut, obtain expert guidance from an architect, structural engineer, or roof truss manufacturer. Work from professionally prepared plans.
- Support roof with braces before cutting rafters to prevent roof failure which can cause severe injury and structural damage.
- Obtain guidance from an architect or structural engineer, if more than one rafter is cut to prevent roof failure and possible injury.

## Important Safety Notes:

- Remove nails and other obstructions to prevent them from being thrown while cutting.
- Be sure electrical wires, pipes, and other building components will not be cut or damaged.
- Wear eye protection and follow safety procedures recommended by saw manufacturer.
- To avoid injury or damage use blocks or bracing to prevent cutout section from dropping as it is freed.
- Stay clear of cutting area while sawing; be especially careful of hand placement and falling debris on the interior, underneath work area.

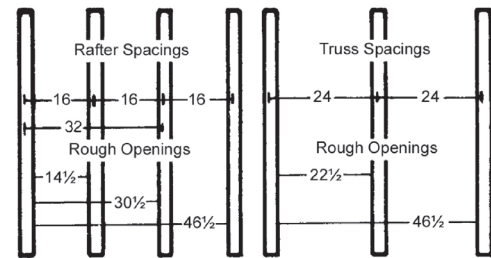
Model Size	Rough Opening width x length	Outside Frame includes flange
1414	14.5" x 14.5"	17.5" x 17.5"
1422	14.5" x 22.5"	17.5" x 25.5"
1430	14.5" x 30.5"	17.5" x 33.5"
1446	14.5" x 46.5"	17.5" x 49.5"
2222	22.5" x 22.5"	25.5" x 25.5"
2230	22.5" x 30.5"	25.5" x 33.5"
2246	22.5" x 46.5"	25.5" x 49.5"
2269	22.5" x 69.5"	25.5" x 72.5"
3030	30.5" x 30.5"	33.5" x 33.5"
3046	30.5" x 46.5"	33.5" x 49.5"
4646	46.5" x 46.5"	49.5" x 49.5"

## Tools and Materials Needed:

- Safety Glasses
- Saw
- Hammer
- Utility Knife
- Crow Bar
- Sealant Gun
- Tape Measure
- #8 x 1 5/8" Truss Head Drywall Screws
- Shingles
- Roofing Felt
- Sealant
- 2" x 4" Lumber
- Plywood/Drywall
- Level/Plumb Bob
- Screwdriver
- Drill

## Planning

Installation is easy - no special tools are required. The skylights fit between standard rafters, roof trusses or exposed beams using a light tunnel when necessary (see back page).



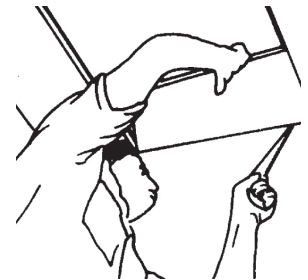
**READ COMPLETELY BEFORE STARTING**

## SAF and SFAW Installation

The SFA and SFAW are curb mounted Polycarbonate Skylights complete with curb (SFA foamliner) and (SFAW prefinished wood interior).

### Step 1

Determine the skylight location inside the house and what lighting effects you want. Check in attic for plumbing pipes, electrical and telephone wiring or heating and cooling ducts. Mark the center of the planned location by driving a nail through the roof from inside. Locate the truss or rafter and cut opening in ceiling.



**IMPORTANT NOTE:** Rough openings should be made to the suggested sizes (see standard size chart).

### Step 2

In the attic, using a plumb bob or level, plumb up from the four corners in the ceiling to the underside of the roof sheathing. Mark them by driving nails through the roof.

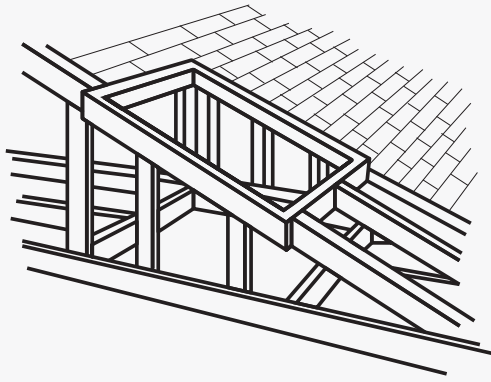


### Step 3


Remove roofing shingles to next full shingle and from the top and sides of the planned opening. Do not remove shingles at bottom of opening.



# Building Light Tunnel

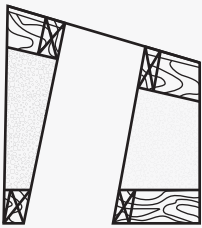


In structures that have a space between the ceiling and the roof such as an attic or crawl space, a light tunnel must be built. Nailers of 2" x 4" must be used to frame the opening between the roof header and the ceiling header. These will be used for attaching the finishing material, i.e., drywall, wall board, plywood, etc. The light tunnel should be wrapped with insulation for optimum performance. Select desired shaft and frame accordingly.

 Indicates 2"X4" Headers

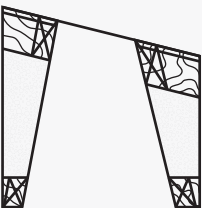
## ANGLED SHAFT

An angled shaft is required when the skylight cannot be positioned directly above the area to be lighted because of existing pipes, electrical wiring, duct work or roof limitations, such as ridges or valleys. Locate the skylight as close to the desired areas as possible, and then build the shaft on an angle to the ceiling opening.



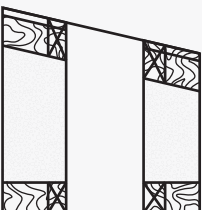
## SPLAYED SHAFT

The splayed shaft is used to permit the greatest light exposure. This is done by making the ceiling opening larger than the roof opening.



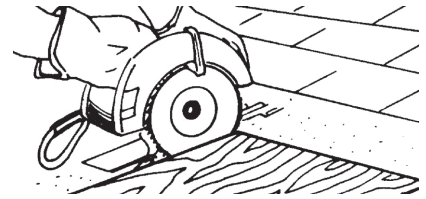
## STRAIGHT SHAFT

A straight shaft from the roof to ceiling can be used. If the roof is flat the ceiling and roof openings will be the same dimension. With a pitched roof, the ceiling opening will be slightly smaller than the roof opening.



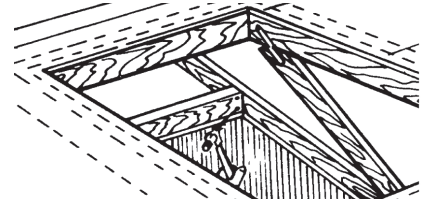
## STEP 4

Cut opening in roof decking. Replace any torn felt paper. Slip the new paper under the old paper at the top of the opening and over the old paper at the bottom.



## STEP 5

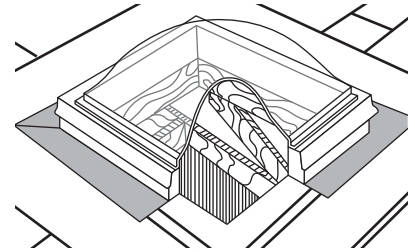
Frame out the inside of the roof opening with double headers at the top and bottom of the opening. Butt 2x4s against the outside of the truss or rafters that frame the opening and nail into place to provide extra stability when mounting the skylight. (Note dotted lines on drawing.) Re: Large skylights, any rafter or truss that runs through the skylight opening must be cut to meet local building codes.



**IMPORTANT NOTE:** If the opening is too big, fill it in with the proper lumber to the suggested rough opening size. (See standard size chart.)

## STEP 6

Apply liberal amount of sealant to surrounding roof surface. Carefully center curb. Using pre-punched holes in flange, secure to roof surface. Apply sealant to cover holes and fasteners, and outside edge of flange.



**Pitched Roofs:** Replace shingles, covering base of flange. Shim skylight to curb for snug fit.

## BUILT-UP ROOFS:

Carefully apply hot pitch or sealant to surrounding area and base of curb flange. Cover with rock.

## ICMG, HCMA, HSAW:

Use #10 x 1 5/8" mounting screws provided.

## CM and CMG Installation

The **CM** is a curb mount Polycarbonate skylight and the **CMG** is a curb mount Insulated Glass Skylight.

Apply sealant/mastic around entire curb top. Carefully center skylight on the curb and push down to ensure a good seal. Nail or screw in place through the pre-drilled holes in the side using weather-resistant fasteners. Do **NOT** use Geocel 2300® or any other incompatible sealant.

**NOTE:** CMG and ICMG models have gasket material already applied to inside of skylight. No sealant required.

**NOTE:** Use Tru-Lite Model (AC) Aluminum curb or (ACW) Aluminum Curb with pre-finished wood interior. May also use an existing curb or a site-built curb.



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