## Acorn Deck House.com

852 Main Street

Acton, MA 01720

800.727.3325

Fax: 978.263.6850

## Helpful Hints for Deck House Owners

It is tough to keep track and organize information for every component for over 60 years, especially before computers, but here are a few helpful hints to help with your Deck House. Keep in mind this is general information and not all information applies to every Deck House.

We can normally help out with questions about/supply of beams, interior & exterior trim, sliding glass doors, windows, interior & exterior doors, railings, stairs, decking, roofing (expect roll roofing and roof decks, generally materials by builder) and siding. Framing and engineering are generally only included with new houses and additions. We do not supply and cannot answer most questions about masonry (including foundation), landscaping (including driveways), plumbing, heating, electrical, appliances, finish flooring, insulation (except roof insulation on a Deck House), drywall, paint, cabinets and countertops. These are were/are supplied by a local builder.

Please check with a local contractor or engineer before changing any structural elements of your home to meet current building codes in your area.

## Informational Videos Specific to Deck Houses (click to view full playlist):

https://www.youtube.com/playlist?list=PLHy00z6UiM\_Cx6OVd3MWH3pvANfl5RrQ9

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## **Roof Information**

- In the Northern half of the United States, today's code (2018-differs from town to town) requires an R-value of 49 (if stretch code), which is 8" of Dow Tough-R or Thermax foil faced both sides if local code calls for with staggered joints in both directions.
- We do not recommend venting a 3 pitch properly insulated Deck House roof.
- Keep in mind wires run between the roof decking and the insulation.
- We do not recommend SIPS (Structurally Insulated Panels); generally less of an R-value per inch than Polyisocyanurate as it could leave gaps or channels where air can travel causing condensation issues (banned in Canada).

#### There are builders/roofers who will only reroof a 3 pitch Deck House roof if they:

- Cover the entire roof in a waterproof underlayment like Grace Ice & Water Shield. To avoid ice damn issues.
- Replace the old skylights with new skylights. Strongly recommended.
- Take down the chimney to the roof and rebuild it back up. The reason for this is that many houses in the past used brick or very porous brick, which can cause problems, or the old pan flash needs to be replaced.

We generally use GAF/ELK TIMBERLINE PRESTIQUE Lifetime HD Ultra (4ea pr SQ).

### From Polyiso.org:

Multi-layering of Polyiso roof insulation installed with staggered joints offers a number of advantages, including:

- Reduced thermal loss at insulation joints
- Reduced thermal bridging
- Reduced moisture migration from the building interior into the roofing system
- Reduced potential for membrane splitting in Built Up Roofing (BUR) systems

IMPORTANT - Typically the fasteners for roof sheathing (OSB or Plywood) are insulation plus 2". If the roof has been modified, please double check the fastener size before installing. If they are too short, the fastener will not go into the roof decking to hold the roofing correctly; if they are too long, the fasteners will go through the decking into the home, damaging the ceiling.

The roof decking has changed slightly through the years (different thicknesses and widths) and today's standard is 5-1/4" wide x 2-1/4" thick. About 98% of the time the roof/ceiling decking is Cedar; 1% Ponderosa Pine; and rarely Fir decking.

The best way to tell the makeup of the roof is to remove the fascia or lift up a shingle, but if you are just looking for what the approximate thickness of the insulation is (if original):

0.75" fascia overhang + 2.25" for roof decking (+/- depending on year) + 0.5" plywood (if after 1982) + 0.375" for shingles = 3-7/8"

- If 1" of insulation, then the roof should measure 4-3/8" from bottom of fascia to top of shingles (if one layer and no Plywood and no venting)
- If 2" of insulation, then the roof should measure 5-7/8" from bottom of fascia to top of shingles (if one layer and no venting)
- If 4" of insulation, then the roof should measure 7-7/8" from bottom of fascia to top of shingles (if one layer and no venting)

If there is condensation appearing only at the peak, then it is possible that the roof insulation is not overlapping at the peak correctly. See rough sketch, page 8.

## **Chimney**

Since chimneys were supplied by a mason per the original owner and not by Deck House, it is tough to say what the fix is for each individual home. However, please see below for some resolutions that owners and/or builders have found throughout the years:

- Have your chimneys inspected by a professional. It is recommended this be done once a year.
- If condensation, then there may not be adequate insulation between the chimney and the roof system. Follow local code to insulate the roof where it meets the chimney. Can be the same problem at any opening within the roof.
- Replacing the flashing
- Resealing the brick (especially if the chimney was built with porous brick)
- Adding an oversized cap
- In the past, many masons used a galvanized pan flash inside the chimney that would drain water onto flashing. Over time this pan flash would rust out and drain into the chimney area. Because of this, many builders now recommend removing and rebuilding the entire chimney above the roof line.
- When reroofing some Deck House builders will only reroof if they can take the chimney down to the roofline and rebuild back up, especially if older used bricks were used originally.
- You may want to make sure your chimney has a liner. From owner, "Had some type of leak develop several years ago, spent a lot of money re-flashing chimney etc. with no success until chimney was (re) lined. It was the furnace exhaust that was condensing through the bricks during the winter months."

## **Velux Skylights**

## **Cutting a skylight opening in an existing Deck House roof:**

- 1. Check the roof to make sure that there is adequate insulation in the roof system and that there is plywood above the insulation. FYI From 1959 to 1981 most Deck Houses did not have roof plywood. The shingles were nailed directly through the insulation and into the roof decking.
- 2. Make sure the roof decking is structurally sound and not compromised.
- 3. Make sure the decking you are cutting has two rafter beams between it and the end of the house for stability.
- 4. Cut your opening for the desired size.
- 5. Hollow out insulation between the plywood and roof decking going up the roof on either side to add roof edge blocking. Roof edge blocking is a 2x built up on the flat or a double 2x that is solid blocking from the decking to the sheathing running 1-2 rows beyond the decking above and below the skylight tying in the cut decking to the uncut decking.
- 6. Before fastening make sure there are no air gaps between the "old insulation" and the roof edge blocking. Air gaps can cause condensation issues. Add insulation as needed.
- 7. Install the skylight as per manufacturer's instructions making sure that between the skylight and the roof is properly insulated.

#### **Skylight Options & Questions to Ask:**

- White interior (lead time generally 2 weeks) or stain grade interior (lead time generally 5 weeks)?
- Fixed, manual vented or solar? (Solar comes with a remote, closes automatically when it rains and can be programed. Solar may also be available for energy tax credits)
- 3/12 roof pitch? If so, could be deck mount or curb mount
- Fixed curb mount units can be custom sizes
- Operable skylights only come in their standard sizes
- 2/12 pitch? If so must be curb mount.
- Shingle roof flashing?
- Blinds or Shades?

## **Solar Panels**

We are not involved in solar panel installations, so we do not have any recommendations. However, please see below for some information and suggestions, which may be helpful:

- Pre-1982, most likely the Deck House roof systems did not have plywood on top of the Polyisocyanurate insulation shingles were nailed on through the insulation into the roof decking.
- It is impossible for us to know what has been done to the roof since any house was built. It was probably reroofed several times.
- It has been suggested to use S.I.P's plates to help distribute the solar panel weights on the roof, but we have not heard feedback on the results.
- The beams were solid Douglas fir from 1959 up until the mid-1980's, then changed to laminated beams.
- Other documents which may be helpful: Lock Deck Handling Instructions, Beam Laminated Information and Plywood rigid foam nail pattern.

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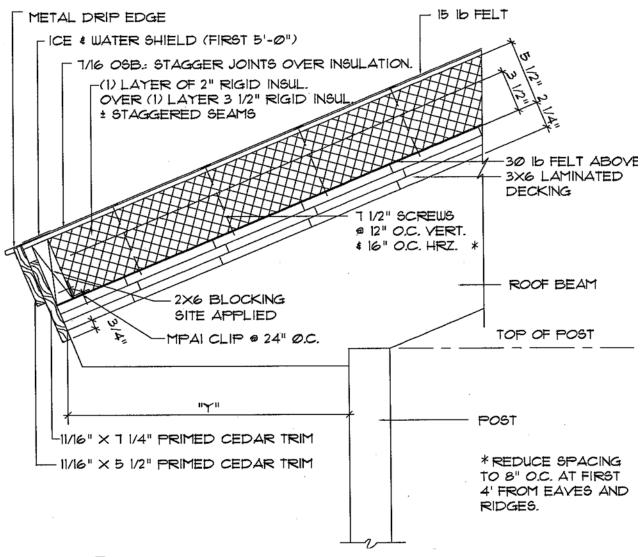
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Note: Not all details apply to all Deck Houses. Insulation roof thicknesses vary.



R5.5 EAVE: 5 1/2" UNVENTED ROOF± R= 39.3

BEAM OVERH	HANG
ROOF PITCH	"Y" : OVERHANG
3 IN 12 :	2'-2 1/2"
4 IN 12 :	2'-2 1/2"
5 IN 12 :	1'-11 1/4"
7 1/2 IN 12 :	1'-4 1/2"

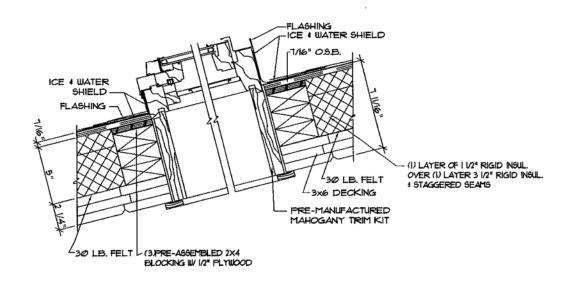
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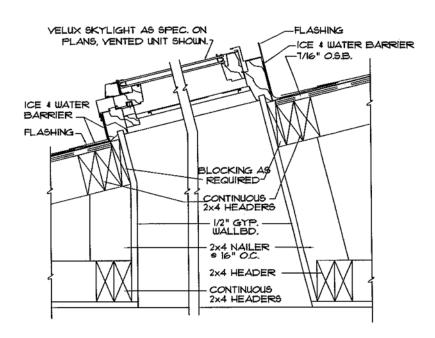
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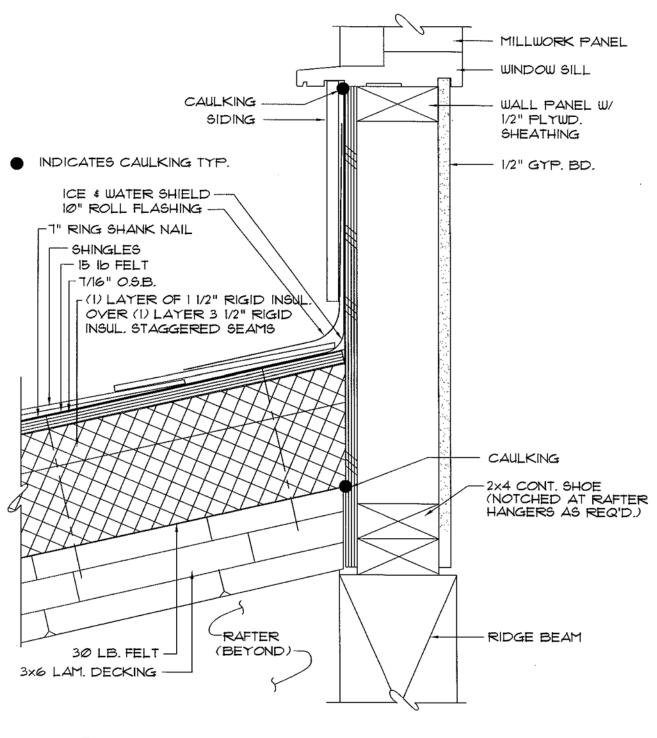
R5 SKYLIGHT @ 5"
6a UNVENTED ROOF



R5 SKYLIGHT: FRAMING DETAIL W/ TRUSS ROOF

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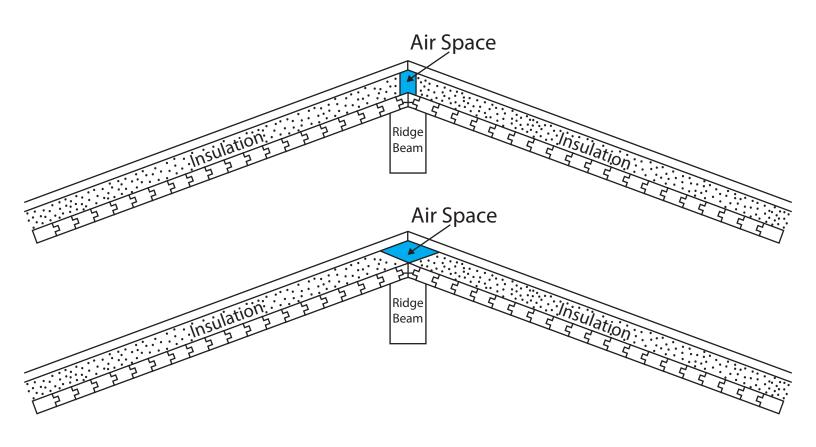


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# Correct Ridge Beam Ridge Beam

## **Incorrect**

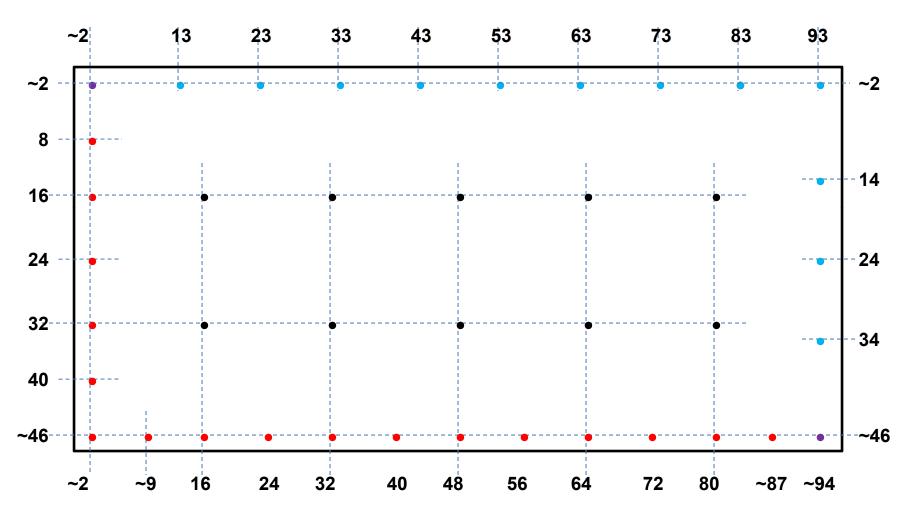








## Fastener pattern for 4x8' plywood or OSB through rigid foam for non-high wind areas



#### Notes:

Numbers are distances in inches from top left corner of 4x8' Interior of plywood: 16" on center (O.C.).

Perimeter of plywood at roof edge (rake & eave): 8" O.C. This is shown in red on two sides (left and bottom); could be one or two sides. Perimeter of plywood elsewhere: 10" O.C. This is shown in blue on 2 sides (top & right); would be 4 sides.

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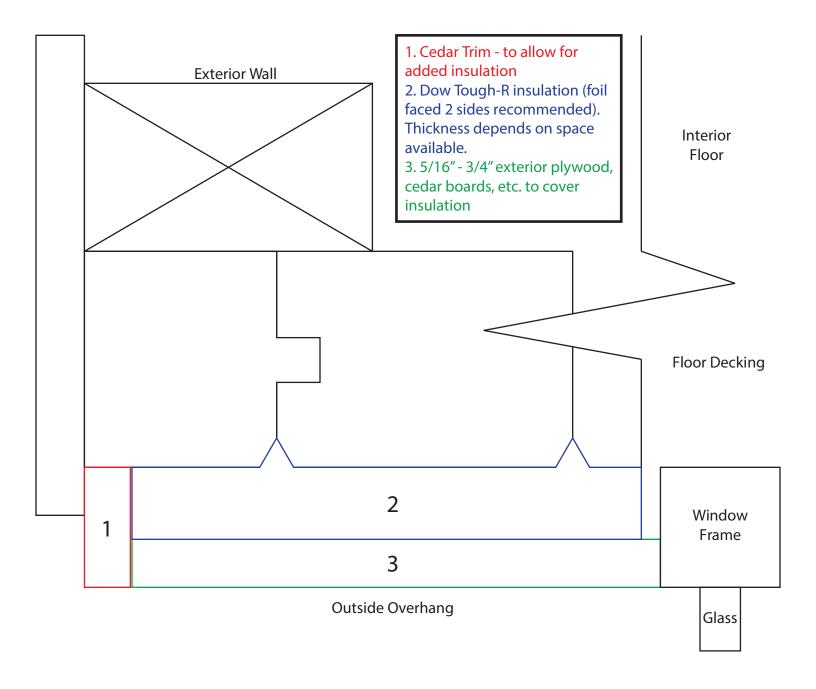
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## Insulating an Older Floor System at a Cantilever



## 3X6 Balcony Decking

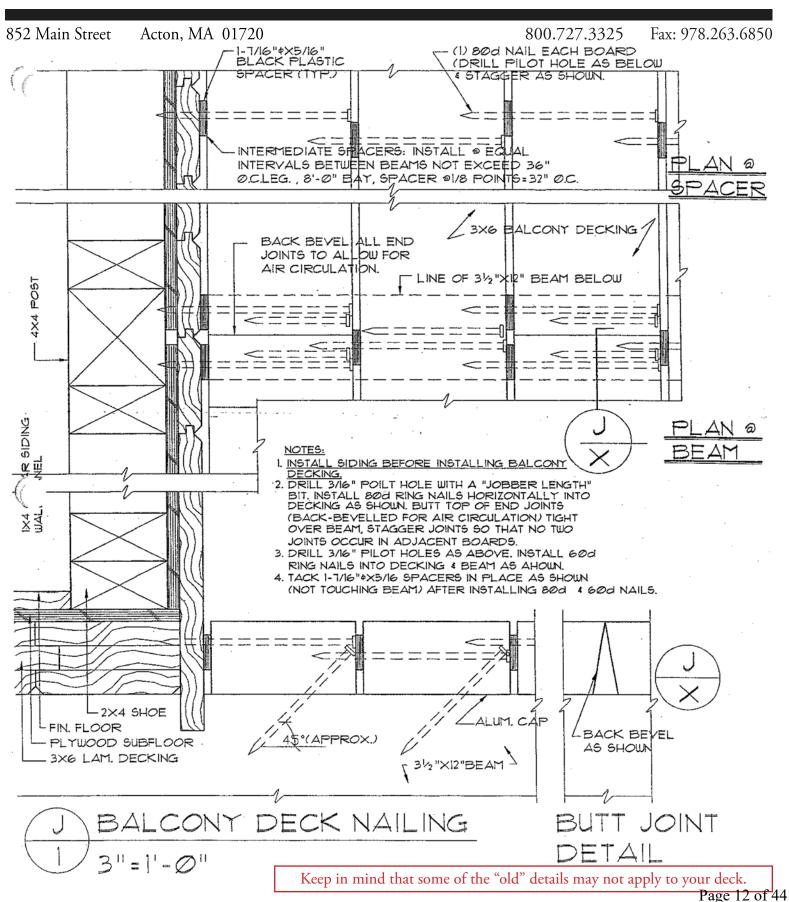
See details section J (pages 12-18)

- Decking, like other wood products, can have what is called Mill Glaze. This is when the blades cutting and shaping the boards seal the cells of the wood. This may not allow stain to penetrate the cells of the wood, so the stain will only sit on the surface, flake or crack and not protect the wood. To help your decking last longer, we strongly recommend cutting the decking to size, sanding all four sides (top, bottom and sides) with 80 grit paper, sealing the boards including the beveled cut ends and then installing the new boards.
- Any piece of wood, especially on the exterior can check (**check = crack**, the exterior and interior of the wood absorbing moisture and drying at different rates). Keeping up with sealing the decking as needed, will help reduce checking of the deck.
- The Deck Beams are generally 8' on center, but there have been bays at 8'6". Before ordering, please verify the length of each section.
- Each deck board should be nailed with a horizontal 8" nail within 3-4" of each end of each board and about 3' O.C. throughout the deck.
- Place a butyl based tape over the beams, then a painted aluminum beam cap, another layer of tape, then the decking (tape and flashing not supplied by Acorn Deck House).

## Some of what not to do...

- If you or your contractor suggests "sistering" (attaching to the side or sides of an existing joist to strengthen a joist) steel or lumber to the side of a deck joist beam, this is generally a very bad idea. If not done correctly, it could be a structural nightmare and/or expedite rot which, in turn, generally weakens the deck and the supports for the roof. If water gets in-between the two members fastened together, neither the sun nor air can evaporate the water.
- Never add decking on top of decking. This will also expedite rot same as above.
- Do not cut off the deck beams without approval from a structural engineer. About 70% of the time the beams split the post with interior beams on the lower post. About 98% of the time these beams also support your roof as well as your deck.
- The worst warping and checking of decking that we have ever seen was in 3x6 pressure treated decking. The cedar decking has a moisture content of 19%, but the treated decking is saturated in chemicals to keep it from rotting. Once the sun hits the treated decking the outer will dry out while the inner core is still wet, causing it to warp.

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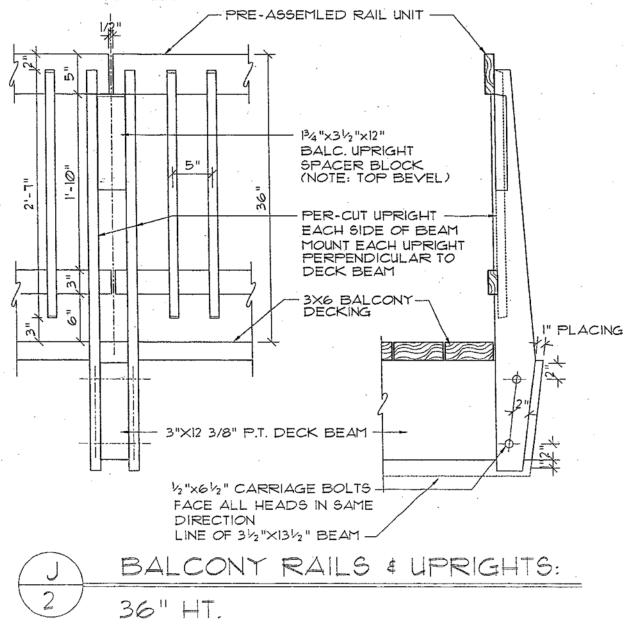
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#### NOTES:

- -FASTEN UPRIGHTS TO BEAM W/(2) 1/2 "X61/2" CARRIAGE BOLTS.
- -FASTEN SPACER TO UPRIGHTS W(2) 21/2" SCREWS EASH SIDE (AS SHOWN)
- -TRIM END(S) OF RAIL UNIT EXTENDING BEYOND LAST BALUSTER TO FIT UPRIGHT SPACING WITH 1/2" BETWEEN RAILS OVER CENTERLINE OF BEAM AND/OR SPACER BLOCK. WHERE RAIL IS TO BE MOUNTED BETWEEN TO UPRIGHTS, TRIM ENDS SYMMETRICALLY.
- -FASTEN RAIL UNIT TO UPRIGHTS W/(20 21/2"#12 SCREWS EACH RAIL.
- -FASTEN UPRIGHTS TO BEAM W/(20 1/2 "X8" CARRIAGE BOLTS WHEN 5" WIDE BEAM IS SPECIFIED.



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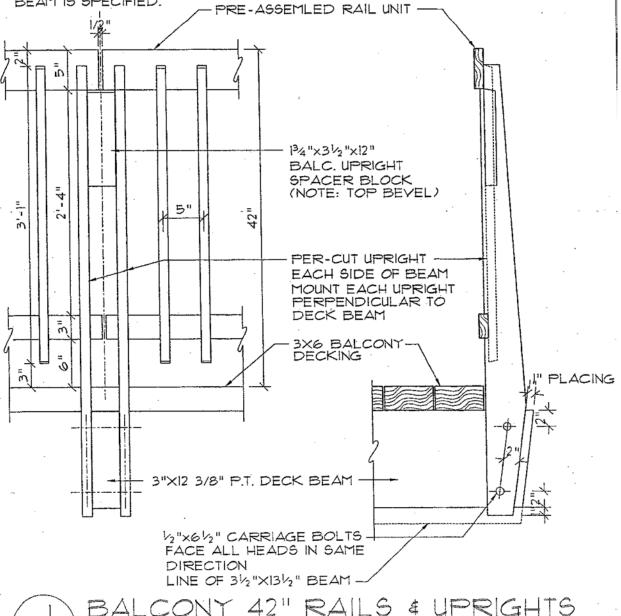
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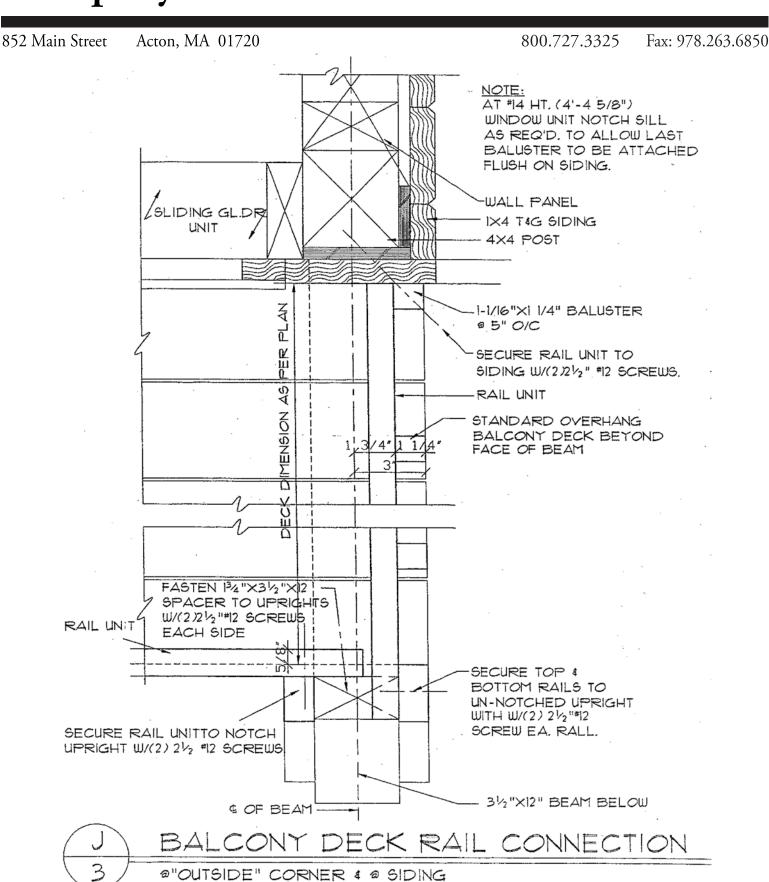
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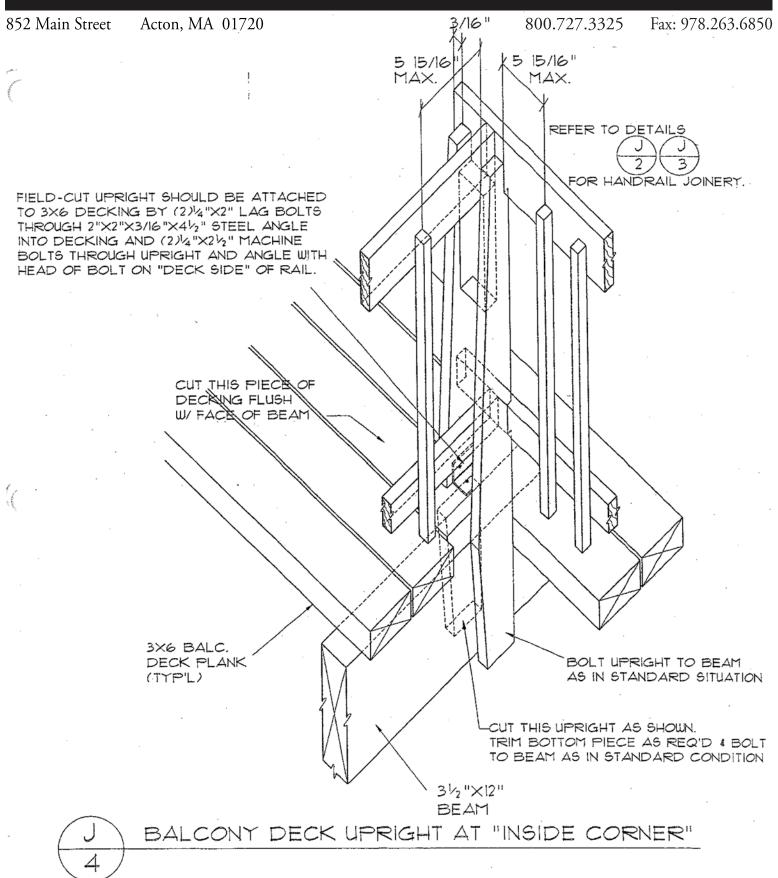
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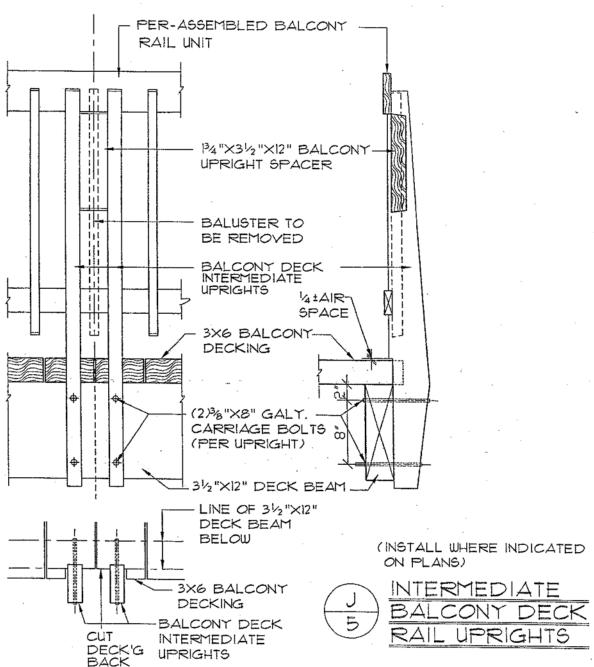
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#### & OF REMOVED BALUSTER

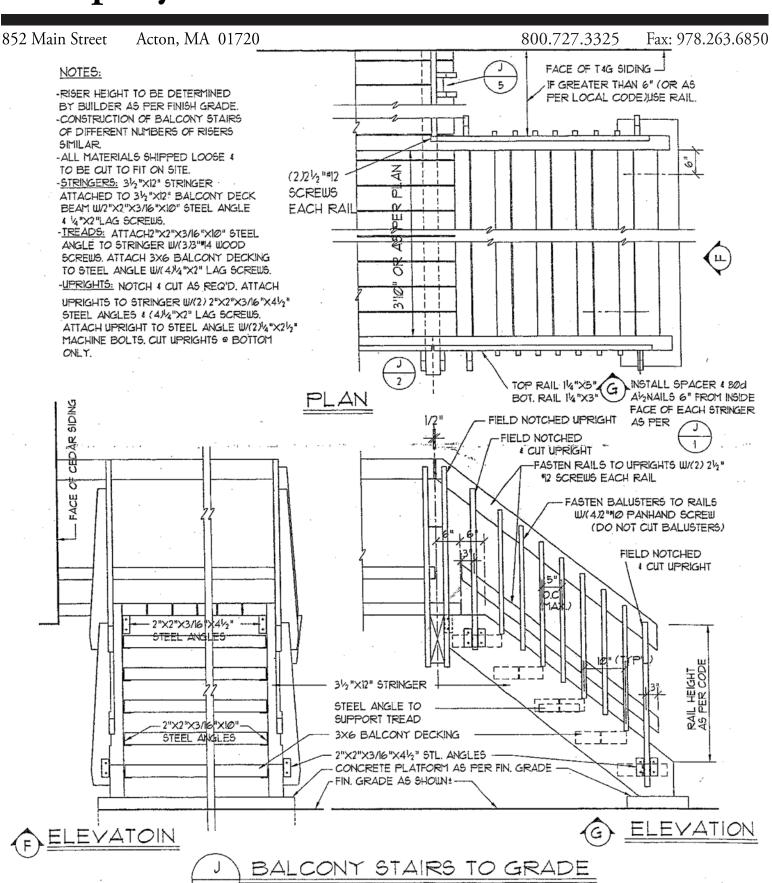


- I. CENTER THE PAIR OF UPRIGHTS ON THE CNTERLINE OF LOCATING BALUSTER AT APPROX. THE LOCATION SHOUN ON PLANS (UNLESS SPECIFICALLY DEMENSIONED), BALCONY RAILING SHOULD SPAN NO MORE THAN 3'-0" BETWEEN UPRIGHTS.
- 2. NOTCH THE BALCONY DECKING TO RECEIVE UPRIGHTS AS SHOWN IN PLAN VIEW
- 3. REMOVE LOCALTING BALUSTER FILL SCREW HOLES WITH 3/8" DIA. MAHOGANY PLUGS.
- 4. USING PREDRILLED UPRIGHTS AS TEMPLATES, LOCATE AND DRILL % "X8" DIAMETER PILOT HOLES THROUGH BEAM.
- 5. MOUNT UPRIGHTS WITH (2% "X8" CARRIAGE BOLTS EACH, AS SHOWN.

  ATTACH SPACER BLOCK BETWEEN UPRIGHTS WITH (4) 2½ "\*12 STAINLESS SCREWS. ATTACH RAILS TO UPRINGTS WITH

  (2)2½ "\*12 STAINLESS SCREW PER CONNECTION FROM "INSIDE" OF RAIL.
- 6. STANDERD RAIL ATTACHMENT REFER TO (J/2) (J/3).

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## Painting, Staining & Preventive Maintenance

\*\*New wood products must to be sealed within seven days or warranty is void\*\*

- 1. Exterior Maintenance Schedule this isn't what most customers want to hear, but some elevations may need to be stained/sealed more than others. What breaks down paints and stains is UV rays and water (dew, condensation, sitting snow, rain, etc.), and some areas will get more exposure than others. Shovel snow off of decks and away from windows, doors and sliders. If the stain breaks down on a window, door or slider, parts will move, expand and contract. When this happens this allows more areas for water to get in and cause the unit to slowly deteriorate.
- 2. <u>Interior Maintenance Schedule</u> It is tough to estimate how often to clean and/or reseal interior wood. There are so many factors involved such as products previously used, heating system type/strength, relative humidity, sun exposure, proximity to moisture and also personal preference. However, you always want to ensure that water, condensation, humidity, steam and any other moisture cannot penetrate the sealant. This will cause the wood to swell and move, so this is especially important to check on windows, doors and sliders.
- 3. <u>Trees & Shrubs</u> It is best to have a balance of growth around your home. If there are too many trees, then dew does not evaporate and your stain will not last. If there are not enough trees, there will be little shade to protect your home from damaging UV rays.
- 4. <u>Weather Strip</u> Make sure all weather strip is fully intact. If water is allowed to get beyond the weather strip, the water will sit stagnant and break down the seal on the wood, which will slowly rot the unit.
- 5. <u>Stain</u>
  - a. Make sure you are using the right product for the job. Not all stains are created equal. Seek a paint and stain professional and let them know the species of wood you have to determine the product to use.
  - b. The surface must be prepared (sanded, etc.) to receive the paint or stain. If you use the best sealant on a poorly prepared surface, it will fail. Therefore, it is imperative to prepare the surface of the wood (especially on new units) as per instructions on the can of the product that you are using.
  - c. Remove all hardware and weather strip prior to staining in order to thoroughly coat all surfaces of the wood. Failing to do so could damage the weather strip and/or the unit you are sealing. The most common areas missed and that may need to be stained more often than other areas are sills and the tops and bottoms of doors, windows and sliders.
  - d. Apply the stain as per the instructions on the can of the product you are using. If you apply stain on a humid day, it may not cure properly and could result in issues opening and closing, or may even damage the unit.
- 6. <u>Mill glaze</u> When wood is cut or milled, the speed of the blades may cause the wood fibers on the surface of the wood to close and, thus, may require sanding before stain application. Please refer to "5b" above on how to properly prepare wood for stain. If this step is skipped, stain will not adhere properly and the wood will not be protected.
- 7. <u>Matching Existing Stain</u> We have owners and builders who swear by Sikkens. Below is from an Olympic representative on interior stain, but it generally (colors) applies to the exterior as well. Both Sikkens and Olympic are owned by PPG Coatings.
  - The stain composition has changed over the years and along with natural weathering and age, there isn't going to be any way to guarantee an exact match. The formulations/blending, that Deck House used are unique to your homes and is something that most retail customers wouldn't necessarily duplicate due to the intermixing done. If you are on the East Coast, which has been impacted by the VOC regulations and the alkyd/linseed oil based stains, are no longer able to be purchased or sold in MA or MD. The color # 708 and 730 are still able to be tinted, but are no longer package colors. The stains are a "hybrid formula" now, Maximum acrylic/oil, and apply a bit differently and will not look the same as the older oil base stains from the 80s. The best suggestion I can make for you to better service your customers is to rematch the newer formulation Maximum to the older linseed oil base stain formulas you created, using your mixing ratios as a starting point. The tint base for the Maximum is product code 79550 and can be used a clear blending agent as well to "soften" the color.

### **Customer quote about Sikkens:**

We just finished sanding and staining the huge lower level of the deck off our kitchen; upper level we did last Fall. Can't say enough about Sikkens Cetol SRD, the professional version. Demanding prep but then you're home free.

## **Paint/Stain Suggestions:**

We always recommend consulting a paint and stain professional before painting or staining your house for the most accurate suggestions.

STAIN VIDEO LINK – Featuring PPG Rep Bryant Mahony answering common exterior stain questions – click here >>> https://www.youtube.com/channel/UCLSaK6-qBUQDzdCKkrQk65g/videos

## **Pressure Washing**

Be extremely careful when pressure washing. If you are too close or if the pressure is too high, you may damage the product you are washing. If you are pressure washing the siding or overhangs, have someone inside while this is being done, as there is a chance water may come in where the roof decking meets the wall at the eaves or rake.

• Some owners and builders have said that TSP and bleach mixed with water works for cleaning. We recommend referring to the prep/cleaning instructions from the manufacturer of the paint/stain you plan to use to seal. Call the manufacturer if prep/cleaning instructions are not included on product.

Before washing and sealing the house you may want to take a look at your weather strip around the sash. They most likely need to be replaced. If they are the old tan weather strip, they may let water in while washing the house.

## **Siding**

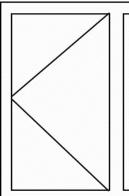
The siding we have today is a #1 grade 1x4 WRC vertical T&G which is 11/16 thick and 3" visible face from V-groove to V-groove. They come in bundles of 6 pieces per bundle. There have been a few different profiles and species since 1959, but this is the most common. But if 3-1/2" x ½" thick Cedar siding, vertical siding with very small grooves running parallel with the siding, different species of wood siding or other that what is above is not something that we have seen or used in the last 20 years.

## Replacing Old Steel Sash from 1959-1974

We have manufactured our own mahogany windows since 1959, but the operable units (sash) were purchased steel units up until about 1974. These steel sash units are very inefficient. They are conductors, not insulators, so if the exterior temperature is zero so is the temperature of the inside of your steel sash. These old units also do not have weather strip and most require a storm panels to keep out the cold.

In 1975, Deck House began manufacturing mahogany Deck House casements and awnings for new homes. We then broke down the same new window components to be retrofitted into the old steel sash opening while utilizing the existing frame. This is how our new mahogany sash can replace the old steel sash without losing visible glass – unlike 99% of the other window replacement options out there. When replaced, the windows from 1959-1974 look like windows we manufacture for new construction today.

The glass is low-e coated and argon filled. The weather strip is a foam filled plastic tube that can compress down to 1/16" and expand up to 1/4", which should create a nice tight seal around the unit even if the frame is out of square due to the house settling.



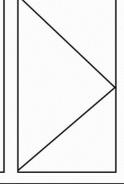
#### **Left Hand Sash**

Viewed from the EXTERIOR the hinges are on the Left OR From the INTERIOR if the window latch is on the Left then it is a Left hand sash.

## **Right Hand Sash**

Viewed from the EXTERIOR the hinges are on the Right OR

From the INTERIOR if the window latch is on the Right then it is a Right hand sash.



# Deck House Replacement Sash Sizes (Range including weather-strip) Sash Sizes

#### **Other Sash Information:**

- These units are energy efficient units.
- The hardware is Truth hardware with a seacoast finish, able to withstand any weather.
- The glass is 3/4" argon filled with a high end low–e coating.
- The double units can be ordered with an emergency egress option two ways.
- The glass can be obscure for your privacy or tempered for your safety.
- The unit or units are made out of solid mahogany per order. The mahogany unit or units arrive without being sealed. It is up to the builder/owner to protect each unit from weather damage & seal the unit within 7 days.

## Replacing Sash Weather Strip (WS)

The brown tube with foam inside replaces the old tan plastic weather strip. To determine how much weather strip is needed (with waste) – Example: Window  $21 \times 28$  (actual sash size  $19 \times 26$ ) = 8' of weather strip

#### **Casements**

 $21 \times 28 = 8$ ' /  $21 \times 40 = 10$ ' /  $21 \times 52 = 12$ ' /  $21 \times 64 = 14$ ' - (newer style) /  $26 \times 28 = 9$ '  $26 \times 40 = 11$ ' /  $26 \times 52 = 13$ ' /  $26 \times 64 = 15$ '

#### Awnings

Retro  $38 \times 26 = 11$ '  $/ 46 \times 23 = 12$   $/ 46 \times 30 = 13$ '

Keep in mind the newer bronze foam weather strip should fit in the same kerf cut as the old tan weather strip. If your sash (the operable part of a window – glass and sash frame) is a mahogany Deck House window then this weather strip should be a direct replacement. Following the instructions below should help seal the window better that ever. The weather strip is beefier than the older tan weather strip, so if the casement or awning does not close nicely:

- Make sure that there is a 1/8"-3/16" gap/reveal between the sash and the window frame. The house may have settled or if the window needs to be sealed then it may have swollen.
- Cut the weather strip at a 45 degree miter so that the weather strip connects at each corner.
- If you do not have the reveal needed you may need to sand or plane or cut the edge of the sash so that you do.
- Re-stain areas that were cut or sanded.
- If you cut the sash you may need to deepen the kerf cut to receive the weather strip
- You may also remove and adjust the hinge tracks to adjust the sash one way or another.

WEATHER STRIP VIDEO LINK – click here >>> https://www.youtube.com/watch?v=Nt3sJBI-Zbo

## **Replacing Window Frame Weather Strip**

The brown tube with foam inside (has a hollow spot) replaces the old tan plastic weather strip. Keep in mind the newer weather strip should fit in the same kerf cut as the old weather strip in the window frame. Windows that originally had steel sash from 1959-1975ish most likely do not have the window kerf cut for window frame weather strip.

## Mahogany Sliding Glass Door (MSGD) - Weather Strip (WS) & Sill Extension

How is the sill? If it is just the sill extension (the thin piece with 4 screws and the weather strip that you step over between the screen door track and the operable panel) then it is just one part. If the sill is compromised, then that is a different story.

The sill extension is taller so you might need to take off the strike side filler, cut and reinstall for the new sill extension which is slightly taller than the one that was there. When replacing make sure to observe how the old one was installed. The sill extension may need to be trimmed to fit. After it is trimmed, the sill extension should be placed so that the weather strip is snug against the operable panel enough that you cannot slide a piece of paper between the sill extension and the operable door, but not too tight where the weather strip buckles and/or makes the door difficult to operate. You will need to silicone the ends but make sure that the silicone does not affect the operable panel.

To order we would need to know the handing of each unit. To determine the handing, identify the placement of the handle as it is viewed from the **exterior**. If the handle is on the right you need a right hand sill extension.

## MSGD WS Strike Side WS

The strike side WS has oblong holes where you can loosen the screws slide the WS closer to the door and retighten. You will need to cut it to size, place the WS right up against the door then screw at the center of the oblong opening. This will allow you to adjust it as needed. With this weather strip, you should not be able to fit a piece of paper between the door panel and the WS.

## MSGD WS Extension – For older bowed sliders (generally 1981-1991 non-laminated stiles)

This wooden piece acts as an extension of your WS if the door or doors are bowed and allowing air and/or water intrusion. The extension is 1/2" x 1-1/4" mahogany predrilled for screws with a kerf cut for WS. The mahogany is cut to size and screwed to the edge of the inside surface of the fixed panel where the two panels overlap. To determine the weather strip needed:

- o If you have less than 5/8" then you do not need the mahogany extension only the WS 600-7134
- o If you have between 5/8" 7/8" then you will need the extension and weather strip 600-4270
- o If you have between 13/16" 1-1/8" then you will need the extension and weather strip 600-7134

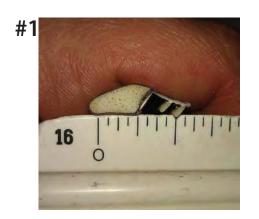
For the cutting of the door for the sweep-

- 1. Install the threshold
- 2. Cut the door so that the bottom of the door is 3/8" higher than the wood on the new threshold evenly.
- 3. Cut two 1/8" wide by 7/16-1/2" deep kerf cuts for the sweep to be inserted into. Starting about ½" to 1" in from each end of the door cut would be about 3/8 in from the door face of a 1-3/4" door but making sure that the two cuts are 15/16 center to center apart.
- 4. Reseal the bottom of the door (and anywhere else that the door needs it) so it cannot absorb moisture.
- 5. Use stainless steel staple or screws to hold the sweep in place.

## Parts and Service

## Weather Strip (w/s)

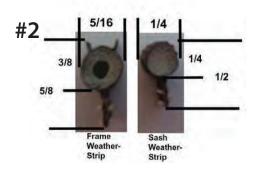
## **Frequently Asked Questions and Answers**



## Astragal/MSGD w/s -photo #1

The w/s to the left is "astragal" w/s used on the the astragal which is attached to the inactive door of a set double exterior doors. This part is also used between and top of the "newer" Mahogany sliding glass doors.

Part # 600-5213



## Window Frame & sash w/s -photo #2

The w/s on the right has replaced the old tan "V" shaped w/s (about 2000). This expands up to about ¼" and compresses down to about 1/16" to seal around the sash. Call for more information. Part # 740-5635
The w/s to the left shows window frame strip.
Part #450-5899



Door Sweep (recommended w/ threshold) –photo # 3 This photo shows the current door sweep. It is mounted into a route in the bottom of the door to help keep air and water out. Available in 36" & 42" 36" Part # 450-5636 & 42" Part # 450-5637

See page 23 for install if you do not currently have a sweep on the door.

Parts and Service

800-727-3325 Ext 311







Weather Strip (w/s)

**Frequently Asked Questions and Answers** 

#4



## Mahogany Slider Sill Ext.-photo #4

This photo shows the current MSGD sill extension (soon to be replaced). This is mounted onto the threshold/sill to help keep air and water out. Need to know the handing if after 1991. Left Hand – if from the exterior the handle is on the Left.

Right Hand-if from the exterior the handle is on the Right. Part # 210-4270

#5



## Exterior Door Stop and w/s –photo #5

Deck Houses of the 60's might not have the stop bead with a groove to accept the weather strip. We can supply the stop bead and/or the weather strip.

Available in 97" pieces (we can cut in half for tops).

Part # 450-5650 (for both) Part # 450-5638 (for just w/s)

#6



## Threshold (recommended w/ Sweep)-photo #6

Older Deck Houses will most likely have a threshold with a rubber bubble. The new one has a piece of mahogany which is much more durable than the older rubber bubble. and/or the weather strip. Available in 36" & 72" 36" Part # 450-5311 & 72" Part # 450-5313

#7



## MSGD w/s -photo #7

This w/s is mounted to the frame of the MSGD against the operable unit.

Part # 450-5635

See top of page 23 for install.

Parts and Service

800-727-3325 Ext 311







## AcornDeckHouse.com

852 Main Street

Acton, MA 01720

## 800.727.3325 Fax: 978.263.6850

## MAHOGANY SLIDING GLASS DOOR HANDLES



1980's Retro Handle Generally in stock Part # 620-3803 approx. \$48.00 each Mortise Lock \$25



Mid 1990's Handle Only have Pins for a loose handle

No parts for this.



Late 1990's Handle No Parts Available can use current handle to replace



Current Handle in stock Part # 600-5240 Approx. \$230

#### **OLDER ALUMINUM SLIDER HANDLES**



New Englander handle. Replacement parts generally available No locking mechanism Part # 620-3819 Approx. \$15 each



Arcadia Slider. Screen door on inside <u>No Parts Available</u>

### **SLIDER WHEELS**



If a mahogany slider, the plastic caps will be on the lower front panel (adjustment area) There are at least two wheels per door. Mahogany wheels # 620-5216 approx. \$11 New Englander wheels # 620-3854 approx. \$11

## With Wheels also consider purchasing these too!

Mahogany Sliding Glass Door Stainless Steel Track Cover Mahogany Sliding Glass Door Roller Channel (4-9/16)

# 600-5433 approx. \$20 each # 600-5215 approx. \$20 each

\*\*Prices and availability subject to change 1/13







## **MSGD** Wheels

Replacing the wheels on sliders with the double wheels with adjustment plugs on the inside face of the slider. If the slider has adjustments on the ends, see "10a" below.

#### **Replacing MSGD Wheels**

## We recommend replacing the roller channel as well; Green notes added by customer

- 1. You will need two people. (3 people made it easier)
- 2. With one strong person holding the weight of the door you will need to lower the door by removing the brown plastic plug and turning the slot COUNTER CLOCKWISE-LOWERS DOOR with a slotted screwdriver.
- 3. Next (if the door has not already cleared the top track) carefully lift the door and swing the bottom inward.
- 4. Place the door on a flat, stable surface being careful not to damage the handle or glass. (saw horses worked well)
- 5. The roller channel could be metal, white plastic or black plastic. If metal or white plastic try to save the roller channel. If white then remove the two end caps off of the roller channel pry and pull out nail a clear-like white plastic
- 6. Remove the gray fuzzy weather-strip
- 7. If replacing the roller channel (black or white) punch the center nail through the plastic
- 8. Remove two screws for each of the rollers you are replacing
- 9. If replacing, remove roller channel and replace new one after removing the weather-strip and nail in the center (push the rollers through weather-strip channel CAREFULLY. It may be easier to do this with the grey weather-strips slid out, and then afterwards slide them back into position in the black plastic channel. The locations of the rollers in the weather-strip is not symmetric, make sure it is correctly aligned with the roller cutouts in the bottom of the door).
- 10. Screw in new rollers making sure the slotted side is facing toward the interior
  - a. If you have a mahogany slider with an adjustment screw on the end (first generation of slider) then you may need to adjust where the wheels site and drill wheel adjustment holes on the inside face of the slider rail to access the adjustment screw. You will also need to ask for bronze plugs to cover the drill hole.
- 11. If white roller channel Predrill and nail in one of the end caps, replace the weather-strip and nail the other end cap
- 12. Carefully place door back in position, top first \*\*IMPORTANT\*\* raise door back so that the top is within the track so that the edge of the door lines up with the jamb and it locks properly. (Use a screwdriver to correct the height of the door or make it level using the slotted adjustment screw).

## Mahogany Sliding Glass Door (MSGD) Information

#### Today's Deck House Mahogany Sliding Glass Door:

- The new MSGD frame matches window and door frames of any vintage Deck House unit.
- The units are fully assembled solid mahogany sliding glass doors with screen and handle.
- The glass has a low-e coating, thermal break spacer and is argon filled for energy efficiency.
- Multiple locking system more than one catch mechanism on the sliding door & jamb.
- Secondary lock slide bolt at top of slider for added security, also locks with door open 4" allowing air flow.
- Stainless steel track cover placed over the track to allow smooth operation over a longer period of time.
- Self-Trimming Interior self-trimming frame, no interior trim required.
- Closed ball bearing wheels prevents dirt from collecting on the grease of the wheels & slowing it down.

## **Measuring to Replace Original Aluminum Sliders (1959-1995):**

• Bay = post to post or beam to beam

- Measure in-between the beams; you should come up with 92-1/2". The slider is 92-1/4" and should fit. Sometimes an original owner will choose a wider entry to accommodate wider stairs. This wider bay would continue to the other side of the house. This would be 8'-6" O.C. and 98-1/2" in-between beams. This slider or window combination would need to be 98-1/4" x 80-1/2".
- If it is on a gable end then there are no beams to measure, but the slider should measure about 90-1/2". Keep in mind that there should be 1" of pine on either side.
- If there is a mahogany window directly above the slider, you can determine the width of the slider by measuring the width of the window unit. To measure a Deck House window, measure the interior frame and outside of frame to outside of frame.
- Height the older aluminum sliders measure about 80" before the trim and have 1" of pine on top.

## Original New Construction Mahogany "Full Size" (1981-Current):

The sliders are most likely 92-1/4" x 82-1/2". There are several ways to check this:

- On the interior, measure what looks to be the interior trim to interior trim which is actually part of the frame.
- Measure the sliding screen, which should measure 45" x 79".
- Measure from inside to inside of beams that may be on either side of the slider. The beams should be 96" O.C. or 92-1/2" in-between.
- Let us know if the units do not appear to be 92-1/4" x 82-1/2".

## **Installation Tips for Mahogany Units (Windows and Sliders)**

- Seal all six (6) sides of exposed mahogany (inside and out before or after installing) on the unit as soon as possible. Warranty will be void if not sealed within seven (7) days.
- Exterior frame should be flush with exterior sheathing so trim or siding can trim out unit.
- The jamb for a 24 wall is 5-1/8" +/- or for 2x6 walls 7-1/8" +/- from face of exterior frame to what looks to be interior trim.
- Pan flash as needed with membrane tape running down the wall over house wrap at the bottom.
- Shim unit it should be installed plumb, level and square.
- Nail 12d finish or screw and plug through jamb and shims into framing.
- Thin waterproof membrane tape sides over sheathing ¼" onto unit frame.
- Thin waterproof membrane tape top over sheathing \( \frac{1}{4} \)" onto unit frame.
- Insulate around unit.
- Install ½" mahogany or drywall on the interior into the drywall groove.
- Trim the exterior of the unit as needed, caulking behind the siding or trim where it over laps the frame by ½".
- Adjust operable units so they open, close and seal properly.

## AcornDeckHouse.com

852 Main Street

Acton, MA 01720

800.727.3325

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## Replacing Your Mahogany Sash Operator

Usually the problem you are experiencing is with the "operator" (the part that the crank attaches to that opens the window) rather than the crank. If the crank is stripped, you will be able to open window using light pressure to turn the stem of the operator (the area that the crank slips over). If the window does not open using this method, the operator shaft has most likely snapped. You should be able to replace the operator yourself if you are able to remove a few pieces of trim and a few screws.

## Determining which style operator you need:



Old Style - The older style operator has one arm and does not have a crank cover. \*Note: current version has rounded edges and may visually differ from your existing operator.\*



New Style - The newer style operator has two arms and has a separate crank cover.

## Determining which handing (swing) you need:

From the  $\underline{\text{exterior}}$  - If the sash's  $\underline{\text{hinge}}$  is on the left, then it is a left hand unit.

From the interior - If the sash's lock is on the left, then it is a left hand unit.

#### How to replace the operator:

- 1. With a sturdy putty knife, carefully remove the side pieces of screen retainer (the trim that the sash closes into), which are nailed in with finish nails. Remove the short piece on the lock side and the full piece on the hinge side.
- 2. Remove the bottom wooden screen retainer that covers the operator.
- 3. Disconnect the operator from the sash.
- 4. Remove screws from the operator and replace with the new operator.
- 5. Replace the screen retainer stock. TIP you can predrill and replace the screen retainer stock with finish screws where the screen will cover. This will help if you ever need to replace the operator again.

We have operators, crank covers and cranks in stock. We will need to know the style and swing when you order.







## **Closing Deck House Casement and Awning Windows**

- The window should not be closed all the way by the crank; it should be closed almost all the way with the crank and then the locking mechanisms should pull the window in the rest of the way. This will help the handles and mechanisms last longer.
- A non-folding handle may be best. There is plastic in the "folding" part of the folding handle that can break. If you want a folding handle, make sure the window opens smoothly. If it does not, a carpenter can remove the sash weather strip and sand or plane down the edge of the window, which may be tight or hitting the frame and causing the window to open poorly.

## Sash Operators - For Deck House Mahogany Windows (Not Steel Sash)

#### Is my casement a left hand or a right hand unit?

From the interior:

- If the locking mechanism is on the right then it is a right hand unit.
- If the locking mechanism is on the left then it is a left hand unit.

From the exterior:

- If the hinge is on the right then it is a right hand unit.
- If the hinge mechanism is on the left then it is a left hand unit.

Remove the handle and look at the stem:

• Loosen the set screw with a small flathead screwdriver at the base of the bronze handle and pull off the handle. Sometimes it will break and come of the operator unit with the handle. If this happens, simply loosen the screw at the bottom of the handle slide the handle off and look at the stem color. If the stem is GOLD the it is a RIGHT hand. If the stem is SILVER then it is a LEFT unit.

### OPERATOR MAINTENANCE INFORMATION - click here >>>http://www.truth.com/technical-

support/catalog/techNote8CareOfWindowAndDoorHardware2.pdf

#### **Determining Style of Operator:**

An older one armed operator (used from 1977 to about 1983)

- Has a steel bronze cover over the crank handle stem that is not removable.
- Within the operator the crank handle stem is offset to one side.
- Has one straight arm that extends out of the base.
- Truth no longer manufactures the angled style. The suggested replacement is curved which requires that the screen retainer bottom mahogany piece be replaced as well.

A newer 2-armed operator (used from about 1984 to current – or if an original one-armed operator was replaced):

- Has a plastic bronze cover that will pop off.
- The crank handle stem is centered within the operator mechanism.
- Has one straight arm that extends out of the base and a smaller hinged arm towards the corner.
- In 2015+ we have had to special order "Heavy Duty" operators and Egress operators. Call for more info.

## **How to Replace a 2-Armed Operator:**

- Remove the screen by lifting it up then pulling out the bottom. Remove the crank handle by either loosening a set screw holding it in place at the base or gently pulling it out. If it is a newer version, it snaps into place by pushing the handle into place or pulling the handle out.
- Using a finish pry bar or a sturdy putty knife, pry the side screen retainer stock (this is the side casement trim that the screen rests against) off of the window frame from the back side. There is one on each side nailed in with finish nails.
- Once they are removed you should be able to remove the bottom sill screen retainer stock (mahogany piece that covers the operator) with a finish pry bar or sturdy putty knife. This will allow you to access all the screws that hold down the operator itself.
- Before disconnecting the sash from the operator you may want to have someone securely hold the sash so it does not fall out. Most likely it will not, but just in case.

  Page 30 of 44

• To disconnect the operator from the sash (operating part of the window unit), open the window about half way. Line up the arrow on the track to the operator arm and gently push down on the operator arm. Then with a fingernail or a screw driver slide back the clip (the silver piece at the end of the hinged operator arm). With a flathead screwdriver slide it under the hinged arm and twist so it pops the hinged arm off of the bracket stub. Now the old operator is free of the sash.

WEATHER STRIP VIDEO LINK – The first part of the video below shows you how to disconnect the 2-armed operator from the sash – click here >>> <a href="https://www.youtube.com/watch?v=Nt3sJBI-Zbo">https://www.youtube.com/watch?v=Nt3sJBI-Zbo</a>

#### Replacing One-Armed Operator with 2-Armed Operator (Current Style).

New parts needed to make this switch include (for each sash):

- The operator correct handing needed
- Track
- Corner bracket for the second arm to connect to correct handing needed
- Crank cover

Existing screen retainer can be re-cut to accommodate the new operator, as the recess is larger and the edges of the recess are covered by the trim. The blocks at the end of the recess in the retainer need to be cut to 0.75" to clear the longer operator arms. The retainer also needs a beveled-cut to clear the long arm when retracted. The recess in the retainer starts at 3.75" from the near end, goes to 8.75" (5" wide), and is ¾" high. This positions the operator at 6-1¼" on center.

For both the operator and the tracks on the sash, the new screw holes will not match the old ones. On the sash, the tracks cover the old holes so nothing shows. For egress windows, the single screen retainer can be re-cut for the two operators. Sash operator bracket should be about 9/16 from edge of the inner most part of the sash.

## **Awning Roto Operator**

Hinge at the top and bottom opens out. If mahogany, there has only been **one** style.

#### To replace, you may need:

- Operator the geared mechanism that opens and closes the sash
- Shoe stud (x2) the metal & black plastic piece that connects the operator to the track
- Crank/handle part that you use to turn the operator

## **Instructions:**

- 1. Remove the screen by lifting it up then pulling out the bottom. Remove the crank handle by either loosening a set screw holding it in place at the base, or gently pull it out. If it is a newer version, it snaps into place by pushing the handle into place or pulling the handle out.
- 2. Using a finish pry bar or a sturdy putty knife pry the side screen retainer stock (side casement trim that the screen rests against) off of the window frame from the back side. There is one on each side nailed in with finish nails.
- 3. Once they are removed you should be able to remove the bottom sill screen retainer stock (mahogany piece that covers the operator) with a finish pry bar or sturdy putty knife. This will allow you to access all the screws that hold down the operator itself.
- 4. Before disconnecting the sash from the operator, you may want to have someone securely hold the sash so it does not fall out. Most likely it will not, but just in case.
- 5. To disconnect the operator from the sash (operating part of the window unit), open the window about half way. Slide back the silver clip at the end of the operator arm. This will release the shoe stud that connects the operator to the track.
- 6. Replace the old operator with the new, reconnect the parts and replace the trim.

## **Deck House Mahogany Windows**

Do not let any window company tell you that you need to "replace" your Deck House glass windows. Most likely you only need to replace the glass with insulated glass and maybe repair casements and awnings. Other window companies want to place a window frame within your window frame, reducing your visible glass by 3-6" and charging you 2x - 4x more than insulated glass alone.

#### **How to Measure for Rectangular Deck House Glass from the Exterior:**

Currently (2020) we use IG 7/8" (3/16" clear –  $\frac{1}{2}$ " bronze colored spacer – 3/16" Solar Ban 60 low-e coated argon filled). Older insulated glass may be  $\frac{3}{4}$ " (sash glass  $\frac{1}{2}$ ", 5/8" or  $\frac{3}{4}$ "). Keep in mind that you cannot match glass colors from the past exactly. Glass companies change the way that they make up glass every 5-7 years.

The best way to measure a window is from the exterior. See below and attached to help from either exterior. We recommend having a builder or professional measure if you are unsure of the size or if you cannot measure it safely.

Let us know if you need anything different, like thinner glass. Be sure to identify if glass needs to be tempered, obscure (pattern 62, rain pattern, frosted exterior = acid etched, frosted single pane interior = white laminated), etc.

- From exterior (rectangle or square), the glass size equals frame size, as listed below, minus 1/4".
- On the exterior measure from inside of frame to inside of frame (where the stop bead meets the frame). Measure left to right in three places: left middle right. Give us the smallest of the three numbers minus ¼", which is the glass size. Follow the same for the height: top middle bottom.

## **Determine the Glass Size of a Triangle from the Exterior - If a 3/12 Pitch:**

- 1. Identify if the high side from the exterior is on the right side or left side of the glass of each piece.
- 2. Measure the width the same way as above (minus  $\frac{1}{4}$ ").
- 3. Measure and identify the high side to the very point on the inside of frame minus 5/16" overall (again if 3/12 pitch).
- 4. Measure and identify the low side on the inside of frame minus 3/16" overall (again if 3/12 pitch).
- 5. Be sure to identify if any piece of glass needs to be tempered or obscure.

#### **Determine the Glass Size of a Rectangle from the Interior:**

It is more accurate to measure from the exterior – see above.

Measuring the inside of frame to inside of frame if with a window sill:

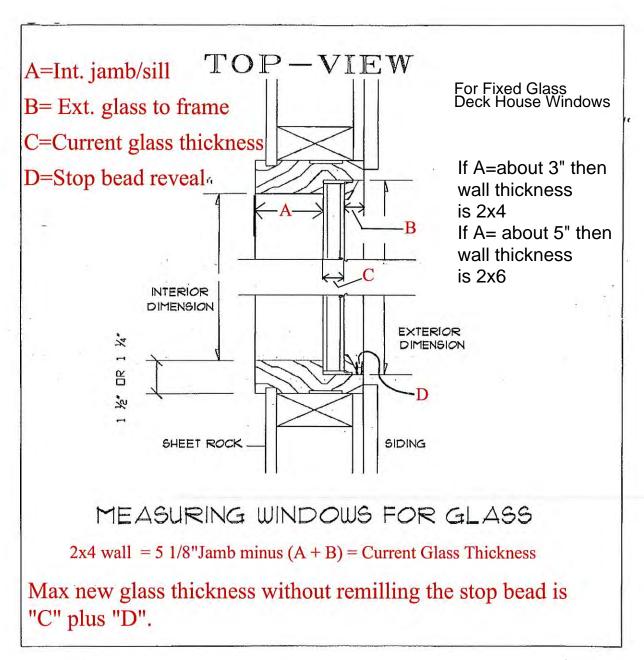
- If the jamb measures 1-1/2" then you add 1" to the visible glass size
- If the jamb measures 1-1/4" then you add 3/4" to the visible glass size

#### Replacing Rectangular DH Fixed Glass – After Receiving and Inspecting the Replacement Glass

- Carefully remove the old glass and make sure that the mahogany is clear of any old tape, silicone dust, dirt, etc.
- Double check the size of the rough opening where the glass is going to sit and for a rectangle make sure the glass overall is ¼" smaller in height and width, if a rectangle.
- Place the 1/16" x  $\frac{1}{2}$ " butyl tape on the inside face of the jamb & sill.
- Place the setting blocks about 6" in from each corner.
- Set glass on the setting blocks with 1/8" space around the perimeter of the glass & frame and up against the tape.
- Inject 2800 silicone and overfill the 1/8" cavity between the glass and the frame.
- Replace the stop bead allowing silicone to overfill. Once cured, trim off the excess silicone.
- Seal stops and window as needed.

## **Determining Deck House casement Glass size**

- Most ¾" non-tempered or obscure glass in stock.
- If there is no stop bead and there is a dry glass gasket (around 1991 to current) =  $\frac{3}{4}$ ".
- There are two ways to check the thickness of casement or awning glass if there is stop bead:
  - 1. Thickness of the sash frame minus the depth of the glass to the face of the sash frame on the front and back.
  - 2. Remove the stop bead by either removing the glass and trying to measure the depth of the glass by carefully removing silicone and measuring the glass in place.



Generally since about 1985 DH fixed glass has been 7/8" thick. 3/16" glass, 1/2 bronze colored spacer, 3/16" glass



## **Deck House Mahogany Swing Doors**

We have been manufacturing mahogany doors for at least 50 years. Before that and even as an option up until 2008, the old Deck House supplied a purchased flush mahogany veneered doors. Over the years and maybe changes in how the purchased door was manufactured, these flush mahogany veneered doors were not up to Deck House standards. The purchased units would delaminate after a short while and Deck House stopped offering them.

Until 1997, Deck House-manufactured mahogany doors had solid mahogany stiles (vertical members). In 1997, Deck House purchased a pneumatic press used to square and clamp doors as well as to create laminated stiles. After testing, the stiles changed from solid to laminated stiles. To make a laminated stile, we glue three solid pieces of mahogany together, no 1/32" veneer, with the grain of each piece running in opposite directions to strengthen each stile. The glue that is used was independently tested and passed with flying colors. The test consisted of boiling the laminated samples for 20 hours then placing them in 250 degree oven for four hours and then running the sample through a second time. The samples passed with zero delamination. Our lamination method virtually eliminates warping, bowing, twisting, cupping, etc.

Our mahogany doors also have a three part connection between the stile (vertical member) and rail (horizontal member). Between the stile and the rail there is mortise and tenon, three glued dowels and it is screwed and plugged.

## Door Threshold & Sweep - See Images #3 & #6 on pages 24 & 25

Older doors had a simple angle cut on the bottom that is taller on the exterior than the interior that locks onto a threshold with a rubber bubble. Today there is a sweep on the bottom of the door with several rubber "fingers" that lock onto a threshold with a mahogany insert. The mahogany wears better than the rubber bubble and the threshold can be a direct replacement. If a sweep is added to an older door the door will need to be cut square by about 3/8".

## Door Weather Strip (WS) - See Image #5 on page 25

Most Acorn Deck House-manufactured exterior swing doors have a nailed on stop bead. But the earlier versions do not have a kerf cut for WS. It was wood to wood, not very efficient. If your door does not have WS with a kerf cut for WS then you can get new stop bead and WS that should nail into a dado of the existing door frame.

#### **Door Options**

See the next few pages for door styles, how to get us the measurement of the door and options. Entry doors can be all wood panels or tempered glass or tempered obscure glass for privacy.

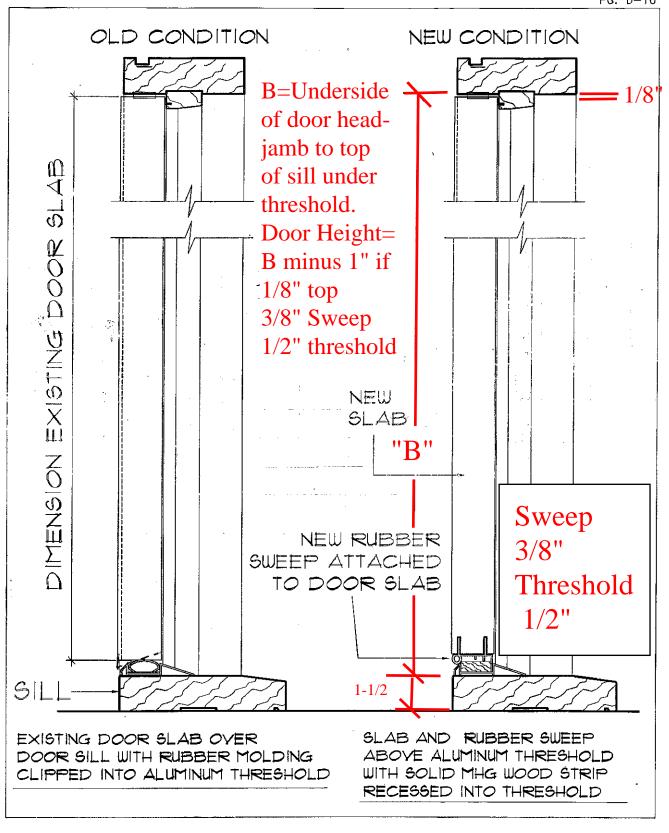
## AcornDeckHouse.com

052 M :- C A MA 01730	000 727	7.2225 E 070.2(2.6050
852 Main Street Acton, MA 01720	800.727	7.3325 Fax: 978.263.6850
1. Exterior Door Style Selection:	☐ Glass Prairie ☐ Glass 4-Panel ☐ A2. If no, jamb width?	Solid 8-Panel Glass 8-Panel Glass 9-Panel 2x4 Yes No
	nore information. *Door sweep and threshold recomme	Head Jamb
B. Door Opening Height: Subtraction Options:  -1/8" for top reveal?	Top View  Standard after all deductions 29-15/16 or 35-15/16	Side View  Standard after all deductions 79-1/4 (6' 8") 83-1/4 (7'-0")  Sill
3. Determining Swing and Handing of a Door:  Please select ONE of the choices below. From exterior of your  ☐ If the door's hinges are on the left and the door so ☐ If the door's hinges are on the right and the door ☐ If the door's hinges are on the right and the door ☐ If the door's hinges are on the right and the door	wings away from you, then it is an in wings towards you, then it is an out-source swings away from you, then it is an in	swing left-hand door. in-swing right-hand door.
*Units are made of solid mahogany per order. The doors arrive unsealed and it is up to t	hei Brass the owner/builder to protect each door from weather damage b	
Signature:	above information and reviewed it to ensure Date:	ns accuracy.









DECK\Manual,Current\D\_Entry Panels\D-18



OLD AND NEW DOOR SECTIONS AS NOTED

Dated
1-22-13

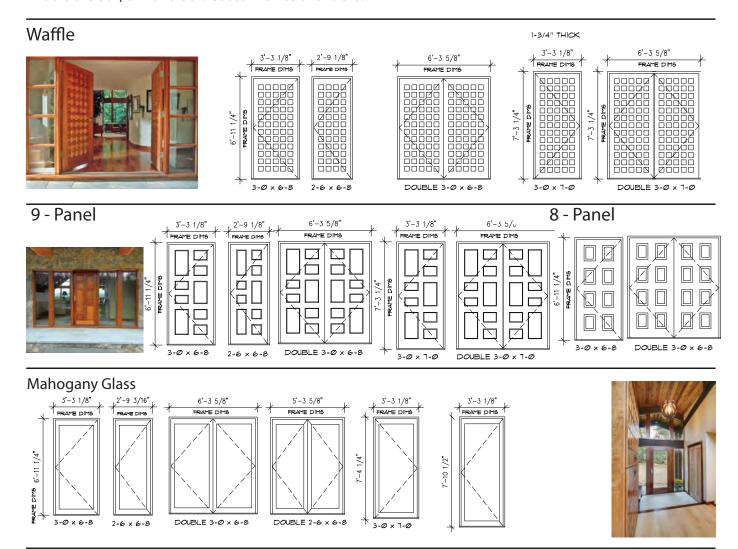
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Type	Size (width x height)
<del></del>	
Waffle	3-0 x 6-8
Glass Waffle	3-0 x 6-8
8 Panel	3-0 x 6-8
9 Panel	3-0 x 6-8
Glass Prairie	3-0 x 6-8
Solid Prairie	3-0 x 6-8
Glass	3-0 x 6-8
Alcott	3-0 x 6-8



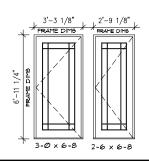
Mahogany Exterior and Interior Doors are offered in a variety of styles including solid wood, waffle design, wood and glass, raised panels, and more. There is a door style to suit virtually every design need. All doors are handcrafted in our manufacturing facility using 100% solid mahogany stiles and rails. Exterior doors can be prehung in a fully weather stripped mahogany frame with heavy duty ball bearing hinges. Standard widths are 30", 32" and 36". Custom sizes available.

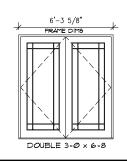


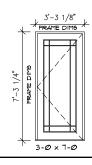
## Mahogany Standard Exterior Doors

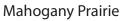
## Glass Prairie

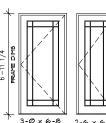


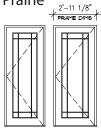


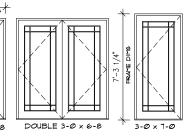






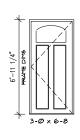


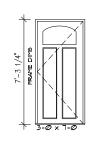




Alcott





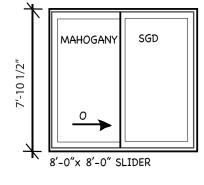


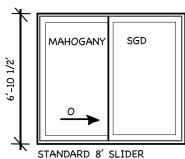
## Mahogany Sliding Glass Door Units

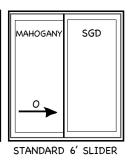




6' 2x6 8' 2x6 8'x8' 2x6







Folding Wall System









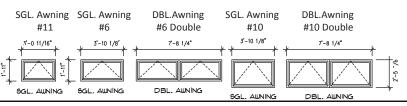
## New Mahogany Windows / Awnings

#### New Mahogany Standard Casement Windows Size (width x height) **Type** 1212 L or R 21 x 28 Single Sash Double Sash Single Sash Wide Double Sash Wide 1313 L or R 21 x 40-3/8 1414 L or R 21 x 52-5/8 21 x 64-5/8 1515 L or R 2222 Dbl 40-3/4 x 28 40-3/4 x 40-3/8 2323 Dbl 2424 Dbl 40-3/4 x 52-5/8 40-3/4 x 64-5/8 2525 Dbl 1111 L or R 29 x 28 29 x 40-3/8 1818 L or R 1717 L or R 29 x 52-5/8 1919 L or R 29 x 64-5/8 2121 Dbl 56-3/4 x 28 2828 Dbl 56-3/4 x 52-5/8 2727 Dbl 56-3/4 x 40-3/8 2929 Dbl 56-3/4 x 64-5/8

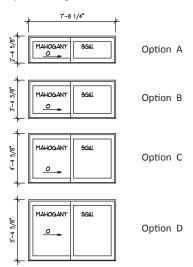
## New Mahogany Standard Awning Windows



<u>Type</u>	Size (width x height)
# 11 Awning	36-11/16 x 23
#6 Awning	46-1/8 x 23
# 6 Dbl Awning	92-1/4 x 23
# 10 Awning	46-1/8 x 29-7/8
# 10 Dbl Awning	92-1/4 x 29-7/8



## **New Mahogany Sliding Windows**



## <u>Type</u> <u>Size (width x height)</u>

A 2'4-5/8" x 7'8-1/4"
B 3'4-3/8" x 7'8-1/4"
C 4'4-5/8" x 7'8-1/4"
D 5'4-5/8" x 7'8-1/4"



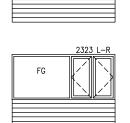
## Mahogany Slider and Window Combination Options

<u>Type</u>		<u>Siz</u>	e (width x he	eight)	No	<u>otes</u>						
Option "A Option "E Option "C Option "E	B" C"	92- 92-	1/4 x 80-1/2 1/4 x 80-1/2 1/4 x 80-1/2 1/4 x 80-1/2		All Tw	l Fixed Gla vo 1616 A	ass (fou wnings	with Fixed	nits d Glass Abov ixed Glass B		Side	
Optio	on "Д"	ı	Optic	on "B" 3 Option <u>+ 2'-</u> 5		wn		Optic	on "C"		Option "D" 2	Options Shown
FG TEMP	FG TEMP	6'-8 1/2"	FG FG	FG FG	6	FG FG	4'-4 5/8"	FG # 6	FG FG	6'-8 1/2"	FG	FG FG
					FG FG	FG FG					FG FG	

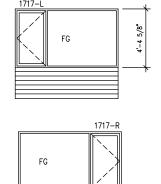
Type Size (width x height) Notes

Option "E" 92-1/4 x 40-3/8 2323 Double Casement with Fixed Glass
Option "F" 92-1/4 x 52-5/8 1717 Single Casement with Side Fixed Glass
Option "G" 92-1/4 x 64-5/8 2929 Double Casements with Side Fixed Glass

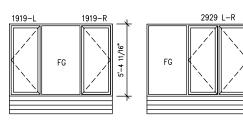


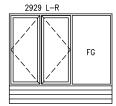


Option "F" 2 Options Shown



Option "G" 3 Options Shown







#### GLASS - SOLARBAN®60 Solar Control Low-E Glass

With its ability to block 62% of total solar energy while allowing 70% of visible light to pass through, PPG's Solarban 60 architectural glass can help you achieve a building design that provides year round comfort with heating and cooling cost savings. In addition to functioning as a clear glass, Solarban 60 glass can also be combined in insulating glass units with an outboard lite of PPG tinted or reflective-tinted glass to increase aesthetic and performance options.

#### HARDWARE - Truth Hardware

Chances are, the window or door hardware in your home was manufactured in Owatonna, MN. In fact, the people at Truth Hardware have been designing and manufacturing window & door hardware since 1955, and are now considered the leading manufacturer in North America. The product line of well over 100 different products now range from simple or complex hinges, operators & multi-point patio door locking handles, to the sophistication of remote-controlled, motorized operators for windows and skylights. Selling directly to such major window manufactures as Marvin Windows, Andersen, Jeld-Wen, Pella & Ply Gem, Truth Hardware has built an unequaled reputation for quality and service that have made them the dominate manufacturer in our industry.

#### DOOR & WINDOW HARDWARE - Hoppe North America

HOPPE North America specializes in precision hardware for doors and windows. They feature a broad product range of North American and European high performance products and offer exceptional service to their distribution partners. Multipoint locking systems for doors and windows with complimentary handle sets and adjustable hinges are featured product lines. They also offer a palette of hardware solutions such as Lift and Slide hardware for premium sliding doors and Tilt and Turn window hardware for high performance windows. Custom engineered solutions are also possible. HOPPE North America has manufacturing facilities and offices in Wisconsin and Ontario.

#### FRAME - SAPELE Mahogany ENTANDROPHRAGMA CYLINDRICUM

A remarkable feature of sapele is that the grain is interlocked and changes direction in frequent, irregular intervals. Before WWI the principal demand for this wood came from Germany where it was used for decorative cabinet work. Interestingly enough, sapele was found in the propeller-blades of German Zeppelins. Sapele is also one of Europe's most desired woods in manufacturing doors, windows and hardwood flooring. It has a wide variety of applications and is very popular as a decorative surface veneer for high-grade furniture such as bookcases and cabinets. Also available in a FCA approved material. Sapele ranges from medium to fairly dark reddish-brown to purplish-brown, while sapwood is whitish or pale yellow. This wood is moderately durable, and its resistance to termite attack varies. While sapele is similar in color to African mahogany, it is more durable than most mahoganies. Its strength is similar to oak.

#### **SCREENS - Alumaroll Specialty Company**

Located in Sheboygan, WI for 50 years Alumaroll Specialty Company is a national fabricator of custom made window and patio door screens. They also roll form window screen frame shapes and offer a wide variety of screen components used in today's fenestration industry.

#### TRACKS & CHANNELS - M-D Building Products

M-D Building Products, Inc. has a rich history of product development and manufacturing expertise. Beginning in 1920 as Macklanburg Duncan, the M-D story encompasses over 90 years of inventing and manufacturing products demanded by our customers. Their products are industry leaders or contend for industry leadership in the categories of weatherization, flooring tools, flooring accessories and digital levels.

## **Deck House Replacement Value**

We offer the following estimate as being typical of building a Deck House today. Bear in mind, that these costs do not include the price of the building lot or the site development (well, excavation, utilities to site, driveway, landscaping, etc.).

Deck House component package, delivered to site \$240/sq ft

Construction by local builder – everything from foundation to carpentry, mechanicals to painting \$340/sq ft Allowances – cabinetry, counter tops, light fixtures, appliances, finish flooring \$65/sq ft TOTAL = \$645/sq ft

If you would like an appraisal specific to your Deck House plans, we can provide one for a fee. However, please keep in mind that individualized pricing per the home's plan would only include the overall component package cost and would not include site work, construction cost or allowances.

## **Condensation**

The information below, gathered from the internet, should help if there is an issue with condensation. See links on condensation articles below.

## **Things that Add Humidity:**

Taken from http://www.askthebuilder.com/590\_Condensation\_on\_New\_Windows.shtml

Uncovered ground in crawlspaces, indoor plants, laundry hung out to dry, cooking activities, aquariums, humidifiers, hot tub, shower, indoor pool, etc. all add water vapor to the air. Add to this the natural humidity that Mother Nature contributes to the air all around us and you can see that humidity is a very common thing.

Water is forming on your new windows because one of several things is happening. The temperature of the inner glass surface is at or below the dew point for the amount of humidity in your inside air. The humidity of your indoor air is quite possibly much higher now with your new windows because the air leaks around your old windows were eliminated once the new windows were installed.

If you discover that your indoor humidity is not too high using your hygrometer, then you can minimize or eliminate the condensation by creating air movement around the windows. Just as blowing air dries laundry hanging outdoors, air blowing over the interior glass will act just like the defroster does in your automobile.

#### **How to Reduce Humidity**

Taken from <a href="http://www.replacementwindows-dallas.com/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors/NT-Windows-and-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And-Doors-And

David Bareuther, Associated Press Building editor, sums up the problem of reducing humidity by saying there are only three ways to reduce humidity:

- 1. CONTROLLING SOURCES OF HUMIDITY: For instance, venting all gas burners, clothes dryers, etc., to the outdoors. Also, use of kitchen or bathroom exhaust fans.
- 2. WINTER VENTILATION: Because outside air usually contains less water vapor, it will "dilute" the humidity of inside air. This takes place automatically in older houses through constant infiltration of outside air.
- 3. HEAT: The process of heating your home will reduce the relative humidity, providing it's dry heat. It will counter-balance most of the moisture produced by modern living.

Now before we summarize specific steps for reducing humidity in your home, let's include some basic data about recommended moisture. You can refer to it if you are inclined to test the moisture levels in your own home. The table below is the result of long and careful experiments at the University of Minnesota Engineering laboratories. It shows the maximum safe humidities for your home, not only for the windows, but even more for your paint, insulation, and structural members. In most cases, reducing moisture to these humidities will cure troublesome condensation on windows; if not, you can reduce humidity further without discomfort to you or your family.

If you test humidity in your home, be sure to use an accurate instrument, preferably a good sling psychrometer. Remember, too, that these relative humidities are for 70 degrees F. For higher temperatures, lower humidities are required.

Outside Air Temperature	Inside Relative Humidity 70 F Indoor Temperature
-20 degrees F or below	not over 15 percent
-20 degrees F to -10	not over 20 percent
-10 degrees F to 0	not over 25 percent
0 degrees F to 10	not over 30 percent
10 degrees F to 20	not over 35 percent
20 degrees F to 40	not over 40 percent

#### 7 Practical Steps to Control Condensation

Here, arranged from easy to more difficult, are the steps you should take to reduce condensation on your windows.

- 1. Install replacement windows with double glazing.
- 2. Shut off furnace, humidifier and any other humidifying devices in your home.
- 3. Be sure that louvers in attic or basement crawl spaces are open and that they are large enough.
- 4. Run kitchen or other ventilating fans longer and more often than you're accustomed to.
- 5. Open fireplace damper to allow easier escape for moisture.
- 6. Air out your house a few minutes each day. Air out kitchen, laundry and bathrooms during use or just following use.
- 7. If troublesome condensation persists see your heating contractor about an outside air intake for your furnace; about venting of gas-burning heaters and appliances; or about installation of ventilating fans.

If the common remedies we suggest (number 1 through 5) don't work, you REALLY have a condensation problem. But the changes your heating contractor may recommend to further reduce humidity in your home should not be very expensive. Certainly they will be less expensive than a big paint job caused by excessive water vapor.