## HOW TO: Quickly Estimate Quantity of Tridipanel

(REVISED 9-'18)

8' Low Income Homes 3.5 Multiplier (1,000 Sq Ft house x 3.5 = 3,500 Sq Ft of PANELS)
9' Mid-Level Homes 3.6 Multiplier (1,000 Sq Ft x $3.6=3,600$ Sq Ft of PANELS)

10' High End Homes (high ceilings/roofs etc.) 3.7 Multiplier (1,000 Sq Ft x 3.7 = 3,700 Sq Ft of PANELS)
Above $10^{\prime}$ will be difficult, highly customized plans will have a 4.0 multiplier

## STEPS

Step 1 (Above) - This give you quantity of panels for the walls \& the roof/ceiling
Step 2 - Mesh Accessories - You take the mesh multiplier (0.63) and multiply the number of total Sq Ft of panels for the project to account for the total amount of accessory mesh that will be needed. This is a rough approximation to be used for pricing purposed only. (ex. 1,000 Sq Ft x $0.63=630 \mathrm{Sq} \mathrm{Ft}$ of Accessory Mesh)

Step 3 - Pick out Multiplier (Cost of panels \& mesh + delivery to site) - $\$ 8$ multiplied by the number of Sq Ft of the project ( $1,000 \mathrm{Sq} \mathrm{Ft} \mathrm{x} \$ 8=\$ 8,000$ cost for panels \& mesh accessories) \& delivery/freight cost. This price is a rough approximation including cost of Tridipanels, accessory mesh, and freight/delivery to job sight.

## Cost Breakdown (SECONDARY METHOD - Approximation Only)

1. $25 \%$ - Cost of panels, mesh accessories \& shipping delivered to build site
2. $25 \%$ - Cost to install dry trades (installing the Tridipanels), door jams, framing window openings, placing all rebar, removing foam forming, shoring etc. Any carpentry and everything ready to pour or spray/apply cement. (*see examples on following page)
3. $50 \%$ - All the wet trades - applying Portland cement skin over panels (by hand, pneumatic application or by shotcrete)
A. Pumping the top side of the roof
B. Pour \& pump lintels, beams, columns etc.
B. Applying cement to the walls, bottom side of the ceiling/roof
C. All masking or protection
D. All additives for cement (water proofing elements etc.)
E. Any additional costs required for applying cement

## F. All finishes (interior and exterior)



## ANOTHER METHOD - Of Costing A Panel Project

You must know the square feet of the panels to build your structure, or project, you should know the cost of panels shipped to the building site, the cost to install the panels, set door jams, and window rebars, per engineering, forming, shoring, scaffolding, labor, (dry trades). Then pricing (wet trades), the cost to apply the cement, shotcrete, interior and exterior finishes. Add it together, and take the Total, and divide it into the total square ft. of panels for your structure, or project. For example, $\$ 35 / \mathrm{sq}$. ft ., divided by 1,000 sq. ft. of panel, so your cost would be \$35,000.

Note: Unit cost will vary per design of the structure and type of architecture chosen. Also factoring into unit cost will be interior and exterior finishes as well as geographical variables (depending on the state/country/county) including average labor cost, equipment available in the area, using pumps, shoring, scaffolding etc.

## Note: WHEN PLACING PANEL ORDERS PLEASE TRY TO KEEP THE PANEL QUANTITY AT A MINIMUM OF 10 EACH PER SIZE AS IT IS DIFFICULT TO SHIP AND TO RE-SET THE MACHINE TO MAKE SPECIAL SMALL CUTS OR QUANTITIES.

## Panel Product Description

All panels are four (4) feet wide with a MINIMUM height of $8^{\prime}$ for each panel. The panels can be cut every 8 " (ex. 8'8', $9^{\prime} 4{ }^{\prime \prime}, 10^{\prime} 8{ }^{\prime \prime}$. . 11'4" etc.) to a MAXIMUM length of 40 '. The foam thickness varies starting at 2", 2.5", 4", 5".

The wire mesh is $5 / 8$ " off the surface of the foam on each side of the surface of the panel. ${ }^{* *}$ Adding 1.25 " to the foam thickness will equal the full panel thickness from wire to wire**. The 9 gauge cross wire is pushed diagonally through the foam \& welded to the 2 "x2" welded wire mesh, every 4", this creates 12 trusses in each panel. NOTE: When ordering roofs \& ceilings/panels you will need full length panels. Also, on the walls it is best to order \& use full length panels.

| Mesh Accessories |  |
| ---: | :--- |
| Flat Mesh | $1^{\prime} \times 4^{\prime}$ |
| 6' Interior Angles | $1^{\prime} \times 4^{\prime}$ |
| 12' Exterior Angles | $2^{\prime} \times 4^{\prime}$ |
| U-Mesh | $2^{\prime} \times 44^{\prime}$ |

## Description of Accessory Mesh

Flat mesh - used to connect all panels together and it is required on both sides of each panel (doubling the length of each panel will give you this quantity) as well as at ALL diagonal corner surroundings each window and each door opening. Allow 4 pieces of 1'x4' Flat Mesh. They will be cut in half at 1'x2' pieces and 4 pieces will be placed on each window (diagonally at a 45 degree angle at all 4 corners above \& below each window) on both sides of the wall.

Allow 2 pieces, $1^{\prime} \times 4$ ', flat mesh for each door opening, and place diagonally above door openings on each side of the wall.

Interior Corner Angles - 1'x4', the same size as flat mesh only these are bent at a right angle and placed at all interior inside corners. These angles will be connecting the panels together. Measure the length in lintel ft of the corner and divide by 4'. This will give you the quantities of $1^{\prime} \times 4$ ' 6 " angles. .

Exterior Corner Angles - $2^{\prime} \times 44^{\prime}$ Exterior corner angles - Used on all exterior corners. I also use them under and above panel floors and ceiling. I also order extra and will sometimes cut them in half, length wise, and use them for flat mesh. They are 2 ' wide 12 " in each direction. They are this width ( 12 " wide) so that when they are placed upright they cover the raw edge of the foam and add strength, and 4" length, to the corner.

U-MESH - Use depending on the engineering. Use to wrap any raw edge where foam is exposed, around window openings, parapet caps on tops of the walls, the ends of roof over hangs, the bottom side of lintels or beam, around garage door opening etc.

NOTE: I sometimes use two pieces of $6^{\prime \prime}, 1^{\prime} \times 4$ ' angles in place of the U-MESH. This is all figured by lintel ft and divided by 4 ft . This gives you the quantity of U-MESH. If using 6 " angles be sure to double the quantity of pieces. ${ }^{* * *}$ The 6 " angles are much easier to ship and fit tighter to the panel ${ }^{* * *}$

## COST \& QUANTITY - SHIPPING

Shipping of Tridipanels \& Mesh - The Tridipanels are usually shipped on open flatbed trucks, 43 ' trailers or longer, depending on panel lengths and foam thickness. The approximate number of panels that can shipped will fall in the between a minimum of $6,000 \mathrm{Sq} \mathrm{Ft}$ and a maximum of 8,000 Sq Ft at a cost of approximately $\$ 1.00$ per Sq Ft , depending on distance shipped.

