

# CHARMINAR

## AC ROOFING SHEETS



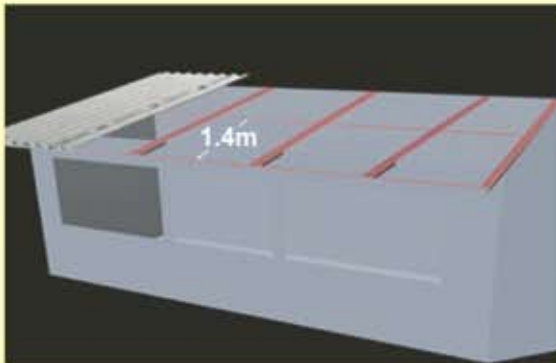
Naam mein dum hai

## Dos and DON'Ts of handling & fixing CHARMINAR Roofing Sheets

Now that you have made the right choice for your roof, please ensure that the following precautions are taken while handling and fixing these sheets. Make sure that your site supervisor or contractor has this leaflet with him.



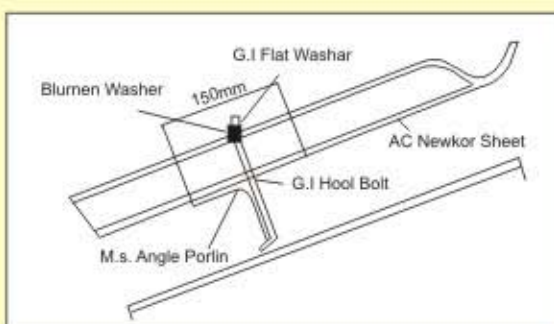
- Do not stack more than 120 sheets in a stock. The smooth surface of the sheet should be upwards.
- Sheets should be lifted at points marked 'N' i.e. crown of corrugation.
- Incorrect handling and stocking can result in damage of roofing sheets which may not become evident until the sheets are fixed.
- Always stack sheets on firm level ground on three battens. Keep sheets of different lengths in separate stacks.



- Always carry the sheets by the end and not by the sides.
- In case the sheets are stored for long periods, shade protection is to be provided.
- The distance between two purlins should not exceed 1.4 mts for roofing and 1.7 mts for side cladding.
- Provide a purlin at every end lap.
- Minimum slope at 18 degree should be provided if slope is lower, end lap should be increased.



- Do not punch holes. Always drill them.
- Size of hole drilled should be 3mm more than the size of the bolt.
- Use Bitumen washers for effective sealing.
- Drilling on sheets must be done at least 75 mm away from edge of the sheets.



- Nuts and bolts should be hand-tightened initially and only after 13 or 14 sheets are laid, the rest sheets may be tightened evenly.
- Tighten the nuts evenly allowing the bitumen washer to merely seal the space between the holes and the bolts.
- Do not over-tighten the nuts as this may damage the sheet.
- Do not use the spanner for final tightening.



- To provide a snug fit where four sheets meet, lap corner of the sheet have to be mitred.
- The corner should be cut from a point 150 mm up the vertical side of the sheet and 40mm along the horizontal edge.
- For cutting the corners always use a saw. Please do not use a cutter.
- Do not use 'stagger' method for laying the sheets without mitring as this could result in cracks.



#### Procedure for Mitring

- For bottom row:  
A - first sheet is uncut.  
D, D, G - has top left hand corner cut
- For second or intermediate row:  
B - right hand bottom corner is cut.  
E & E - right hand bottom and top left hand corners are cut.  
H - Last sheet only top left hand corner is cut.
- For top row:  
C, F & F - right hand bottom corner is cut.  
I - is fixed uncut.



- Bolts are to be fixed only on the crown of corrugation and not in the valley.
- Bolts are to pass through the second and the last corrugation of every sheet as shown in the figure.
- Do not fix bolts on the sheet at any point other than the on suggested.
- Do not exceed free overhang of 300 mm at the curves.
- Cot ladders must be used while working on the roof.
- Safety precautions as recommended must be followed.



#### CAUTION

Asbestos cement products present no known risk on health as they contain only a small percentage of asbestos firmly 'locked in' with cement during manufacture. Follow recommended work practices during installation to avoid emission of dust. Inhaling of asbestos dust in excessive amounts over a prolonged period can be injurious to health.

#### RECOMMENDED WORK PRACTICES DURING INSTALLATION

- 1) To keep dust levels down, cutting and drilling operations must be carried out in the open or in well-ventilated areas.
- 2) Use hand-operated tools such as drills, hand-saws etc.
- 3) Use of pneumatic/ electric power tools and abrasive is not recommended.
- 4) Any waste created during working operations should be collected, after damping in impervious bags and buried underground.

For more information and assistance, please contact:



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