

**PRODOME DOME ROOF MATERIAL
SPECIFICATION****ATECO Aluminium Dome Roof Material Specification**

All materials of construction will be provided in accordance with the provisions of API 650, Appendix G, unless per written agreement between purchaser and ATECO.



The following standard materials are provided for Aluminum Geodesic Dome construction

| Pos No | Item | EN Code | AA Code | Description |
|---|---|---------|---------------------------------------|---|
| DMS.100 Fully Triangulated Dome Spherical Struts | | | | |
| | I Beams | | AA 6061 T6 / AA 6065 T5 | Mill Finish Aluminium |
| | Perimeter Tension Ring/Compression Ring Beams | | AA 6061 T6 / AA 6065 T5 | Mill Finish Aluminium |
| | Beam Joint Plate | | AA 6061 T6 / AA 6065 T5 | Mill Finish Aluminium |
| | Structural Frame Gussets (Node Plate) | | AA 6061 T6 / AA 6065 T5 | Mill Finish Aluminium 10 mm |
| DMS.200 Cover | | | | |
| | Triangular Closure Panel Skin | | AA 3003 H16 - 1.2 mm | Mill Finish Aluminium |
| | Manway | | AA 3003 H16 - 1.2 mm | Mill Finish Aluminium |
| | Peripheral Skirt | | AA 3003 H16 - 1.2 mm | Mill Finish Aluminium |
| | Triangular Skylight Panels | | | 8 mm thick Acrylic or Polycarbonate Skylight square footage shall be %1 of covered area, minimum. |
| DMS.300 Cover Fasteners-Attachments Extrusions | | | | |
| Systems | | | | |
| | I Profile, L Profile, Bars | | AA 6063 T5 | Mill Finish Aluminium |
| | Angless, Billets, etc. | | AA 6063 T5 | |
| | Dormers, Doors, and Hatches (if specified) | | AA6061-T6/AA5058-H34 or AA5052-H36 | 2.5 mm Nominal Thickness. |
| Fasteners | | | | |
| | Structural | | | 7075-T73 Anodized Aluminium or Series 300 Austenitic Stainless Steel lock bolts. |
| | Joints | | | Austenitic Stainless Steel |
| Seals | | | | |
| | Batten Bar Extrusion Gasket | | | Silikon |
| | Caulking | | | Silikon |
| Anchorage | | | | |
| | Support Leg | | | Carbon Steel/Stainless Steel |
| | Gussets | | | Carbon Steel |
| | Friction Bearing Pad | | | P.T.F.E. (Teflon) |
| | Isolation Bearing Pad | | | Austenitic Stainless Steel |
| | Anchor Bolts | | | Series 300 Stainless Steel. |

Materials, notes:

The dome manufacturer should ensure and confirm suitability of the dome design for the service conditions, and media to be stored. Water tightness should also be confirmed as a design objective, where this can be tested with a water spray test or during adverse weather conditions.

The use of any materials in the dome structure other than aluminium or stainless steel is expressly forbidden. Cadmium plated bolts, galvanized bolts, or other dissimilar materials can introduce serious concerns for galvanic corrosion, and as such can not be used.

The use of mastic batten bar gaskets, or rubber batten bar gaskets such as Neoprene, EPDM, Viton or other rubbers is not allowed to avoid accelerated ageing of the dome structure.

| | Prepared By / Hazırlayan | Checked By / Kontrol Eden | Approval By / Onaylayan | | | | |
|--|--------------------------|---------------------------|-------------------------|--------|--|------------|--|
| | | | | Job No | | Serial | |
| | | | | Format | | Project No | |
| | | | | Doc.No | | Order No | |