



CM 2005 ROOF SHEETING DESIGN

ROOFING CONCEPTS (PTY) LTD



SELF SUPPORTING ROOF SYSTEM

APPLICATION

- Sport centres / Equestrian Pavilions
- Industrial or agricultural warehousing / Supermarkets
- Carports / Garages and Storage Buildings
- Hospitals / Residential Housing etc

ECONOMIC ADVANTAGES

- Speedy installation
- High quality
- Durability
- High security

Sanitary Warehouse



TECHNICAL CHARACTERISTICS

MINIMUM GUARANTEED YIELD STRENGTH-235 MPa
HARDNESS - TABER BLASING 10mg - 50mg
MAXIMUM TEMPERATURE RESISTANCEMaximum continuous temperature 90°
MODULUS OF ELASTICITY2,1 x 10 MPa

CHEMICAL CHARACTERISTICS OF CORROSION RESISTANCE

- Kesternisch: 20 cycles Dim 50018 pollution
- Tropical test: 1000 hours ASTM D2247.
- Saline mist: 500 hours NFX 41.002.

RESISTANCE TO CORROSIVE AGENTS

- Acids - good
- Basis (alkalis) - medium
- Mineral oils - very good
- Chlorine solvent - medium
- Aromatics - good
- Alcohols - good
- Alifatics - very good

QUALITY

CM 2005 is manufactured from cold rolled steel sheets, galvanised by hot emersion on both sides, primer and final paint coated. CHROMADEK is a pre-primed product finished with a top coating with a nominal thickness of either Polyester, Silicon polyester or New polyester.

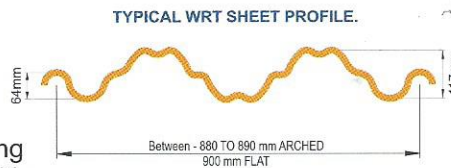
The total nominal thickness of the coating system on the exposed side is 25 micrometres.

Compared to traditional roof sheeting THE SUPPORTING ROOF SHEETING is an innovative and unusual system. It can bridge large spans without any intermediate support.

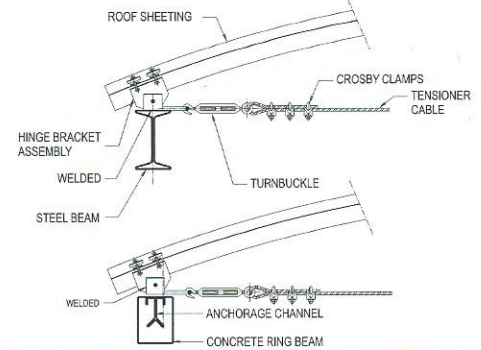
This is made possible by combining the strong sheet characteristics with the stiff geometric form of an arch.

This roof system is composed of profiled steel sheets joined to each other, with special bolts, fitted with steel and rubber washers.

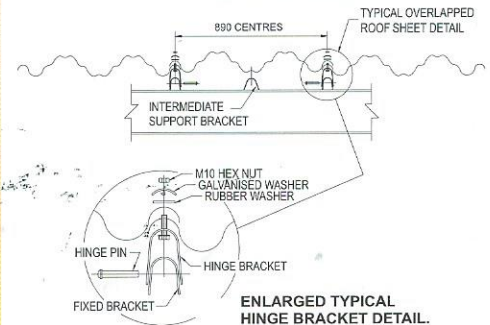
These sheets are fixed to the supporting structure through a steel saddle, that fits snugly into the sheet profile, creating a hinged bracket.



TYPICAL DETAIL APPLICATION ON STEEL BEAM / CONCRETE

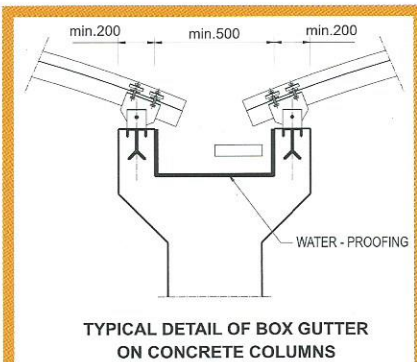


TYPICAL MOUNTING DETAIL



SECTION PROPERTIES OF CM2005 ROOF SHEETING

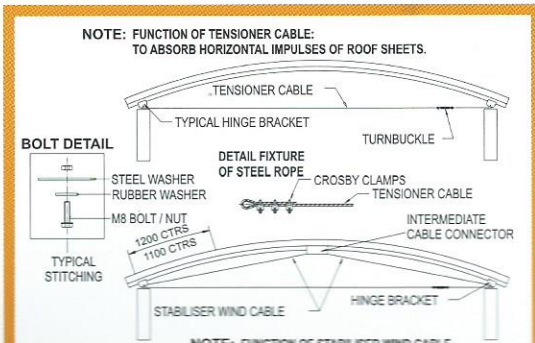
t Thickness m/m	w Height kg/m ²	as Area of Section {x10 ⁵ mm ² }	ml Mom. of inertia {x10 ⁸ mm ⁴ }	fm Flexion Mod. {x10 ³ mm ³ }
0.80	8.58	0.984	2.57	44.31
1.00	10.73	1.230	3.21	55.34
1.20	12.87	1.476	4.01	69.14
1.50	16.09	1.845	4.81	82.93



LOAD TABLE OF CM2005 ROOF SHEETING

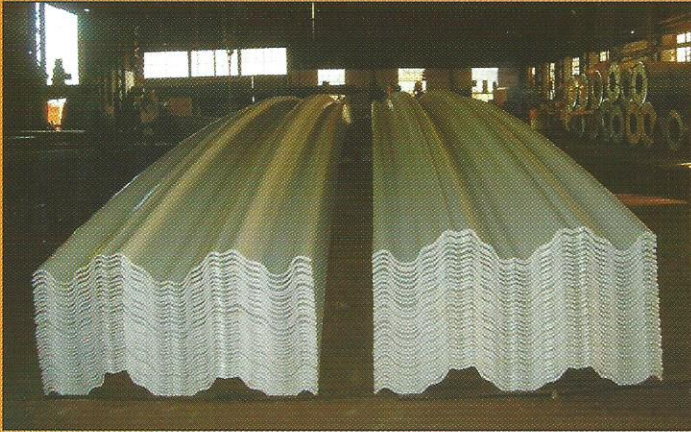
FLAT ROOF SHEETING			ARCHED ROOF SHEETING						
Thickness (mm)	Max. span bet. sup. (mm)	Maximum overhang (mm)	t Thickness (mm)	S Max. span Bet. sup. (mm)	O Overhang (mm)	r Maximum Radius (mm)	r Height on Centre (mm)	h Height on Centre (mm)	ml Max. L. of Sheet (mm)
0.60	4,000	2,000	0.80	15,000	0.750	24,040	24,000	1,200	16,500
0.80	7,200	3,000	1.00	21,500	1,250	34,840	27,360	1,700	24,000
1.00	8,100	4,000	1.20	25,000	1,250	35,120	29,300	2,300	27,500
1.20	10,000	4,500	1.40	30,000	1,500	39,000	35,740	3,000	31,000
1.40	12,000	5,000							

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NOTE

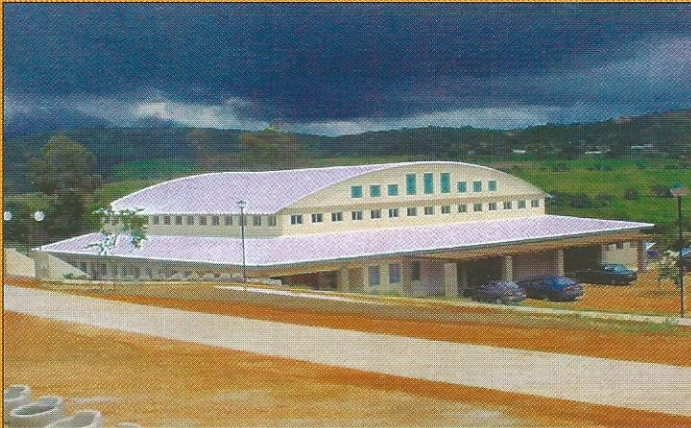
We design, manufacture and install steel structures for our self supporting roof system, on client request. Easy installation of suspended lighting systems, airconditioning ducts & various types of ceiling applications. All design proposals are to be consulted by our Engineering Department.



Roof Sheets - Stacking CM2005



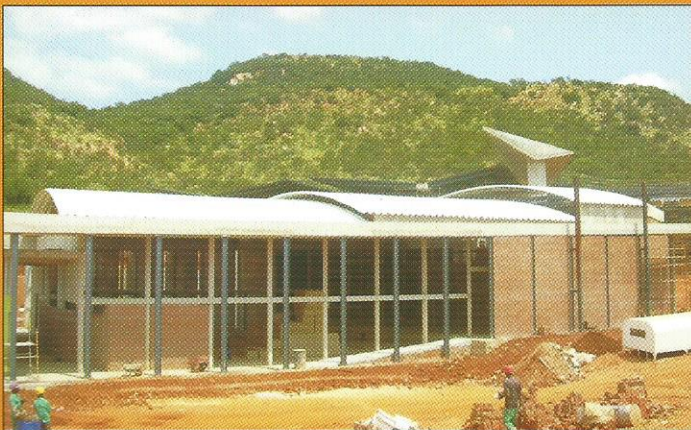
Rubber Moulding - Finish Option



Church



Interior Ceiling & Lighting



Theatre Hall



CM2005 Sheeting Installed



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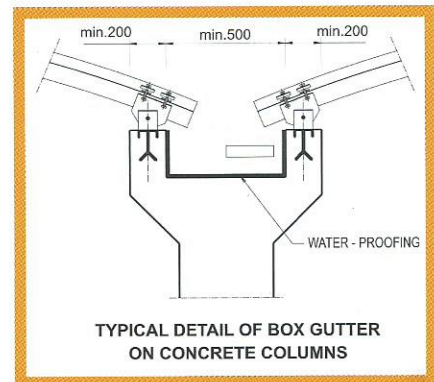
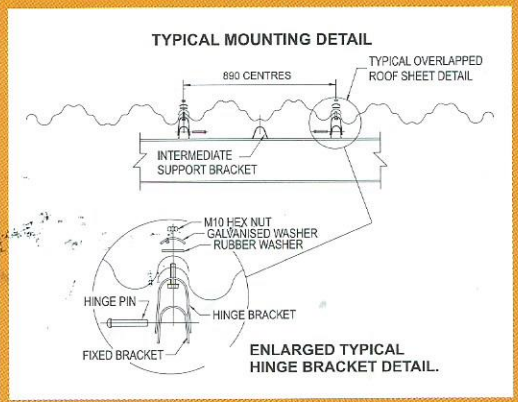
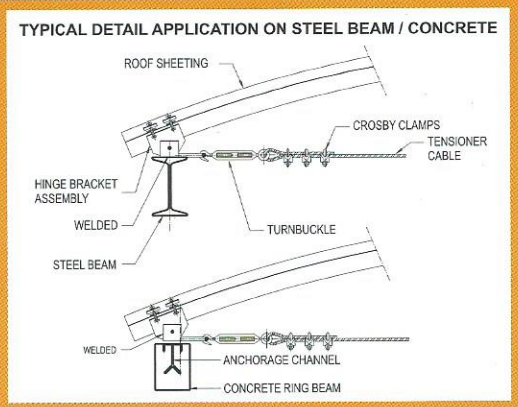
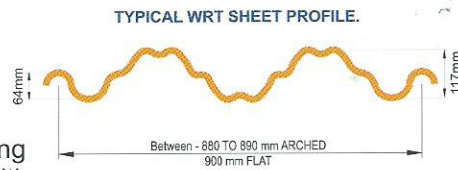
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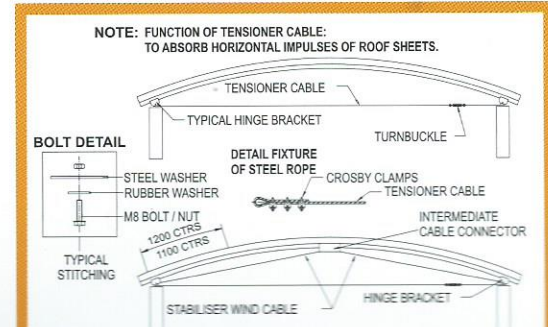


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