

SATAS MS 78.4

No.	SUBJECT	N/C	COMMENTS/OBSERVATIONS
1	Job reference		
2.0	Process Control		
2.1	Is the infrastructure adequate.		
2.2	Is all equipment in use maintained and in good		
	condition.List equipment checked during the Audit		
2.3	Product handled in a manner that prevents damage? Handling methods?		
2.4	Roof support columns specified and inspected by competent person.		
3.0	Storage of material		
3.1	Is product stored in a manner that prevents damage or deterioration?		
4	TIMBER STRUCTURE		
4.1	Are Poles from an accredited pole supplier?		
4.2	Rafters spacing not more than 900mm centre to centre?		
4.3	Are all exposed resawn pole surfaces brush painted? Cut ends nailplated 35% covered SANS 6.2.1.2		
4.4	Nail penetration acceptable (2/3)		



SATAS MS 78.4

4.5	Are trusses spaced not more than 2700mm apart?	
4.6	Minimum pole top diameter class 100mm – 125mm	
4.7	Buildings with a span of more than 6 meter shall be designed by a competent person and passed by an engineer (Evaluate Certificates)	
4.8	Battens and laths. Minimum diameter of 25mm.	
4.9	Lath and batten spacing as per SANS 10407	
5	STRUCTURAL DESIGN CONFIGURATIONS	
5.1	Rational design or rectangular gable to gable less than 6 m span	
5.2	Rafters diameters, Anchored with 4 mm galvanized wire	
5.3	Kingpost diameters Bolts	
5.4	Tie beam diameters Bolts	
5.5	Ridge collar diameter Bolts	
5.6	Ridge braces diameter Bolts	
5.7	Diagonal brace diameter Boltes	
5.8	Bottom longitudinal brace 125mm diameter nailed to kingpost and tiebeam	



SATAS MS 78.4

Thatcher/Contractor: ...... Date: .....

6	SLOPE
6.1	The primary structural pitch shall be at least 45°
6.2	Any secondary pitch (e.g. over dormer window) shall be at least 35°
7	CONNECTORS
7.1	Washer sizes acceptable
7.2	Min distance bolt to pole end measured on centre-line of pole and min spacing between bolts in mm (tension members only) Dist Space
	M10 75 100   M12 90 120   M16 120 150   M20 160 200
8	<b>Thatching Grass</b> Hyperrhenia Hirta, Hyperrhenia Phillependula, Yellow or red Tamboekie, Hyperthelia Dissoluta Common or fine thatching grass (Hyperrhenia Hirta and Hyperrhenia Phillependula) for use shall:
8.1	Have a cut length of not less than 800mm (measured from but end to top but not including seed ends)
8.2	Butt end diameter min max Thatching grass 1,2mm 2,5mm Yellow or red tamboekie 2.5mm 5mm
8.3	Be acceptably straight (cut above the first nodes)
8.4	Be free of loose material
8.5	Not cut in the growing season
8.6	Be free of seed heads when cut



SATAS MS 78.4

9	Cape Reed Thamnochortus species for use shall
9.1	Have a cut length of not less than 1000mm
9.2	Butt end diameter mm min 1.2 max 5
9.3	Be acceptably straight (cut above the first nodes)
9.4	Not be cut in the growing season (to ensure that the nodes are tight)
9.5	Be free of sand and stilt
9.6	Be workable, mature and ligneus
10	Water Reed Phragmites Australis, Phragmites Communis
10.1	Have a cut length of not less than 1500mm and 1800mm respectively
10.2	Butt end diameter mm min 1 max 7
10.3	Be acceptably straight
10.4	Have a taper towards the plume
10.5	Have no secondary growth
10.6	Not be cut in the growing season (to ensure that the nodes are tight)
10.7	Be free of sand and silt
11	THATCH LAYERS
11.1	ThicknessSway coverfine thatching grass17570Yellow and red20080Thatching reed18080Water reed300100



SATAS MS 78.4

# Thatcher/Contractor: ...... Date: ......

12	THATCH BINDING	
12.1	Sways shall consist of either: Galvanized wire with a min diameter of 3,15mm Cape reed in bundles of at least 10mm.	
12.2	The materials used shall be tar-treated sisal twine or stainless steel or galvanized wire with a diameter of between 0.9mm and 1,2mm.	
12.3	Stitching spaced at a maximum of 110 mm	
13	SPREI LAAG	
13.1	Thatch or reed shall be combed to ensure that the stalks are clean prior to installation.	
13.2	Butt ends shall be positioned and concealed by batten or lath.	
13.3	Seed ends are not to be visible	
14	RIDGES	
14.1	GRASS RIDGE	
14.1.1	The bundles of ridging grass shall be bent over the ridge and securely anchored onto the two topmost battens with sways	



SATAS MS 78.4

# Thatcher/Contractor: ...... Date: ......

14.2	FIBREGLASS RIDGES	
14.2.1	Two battens shall be spaced at 150mm above your last line of thatch in both single or double ridge construction. This line shall also be stitched down to secure the thatch in two places. If cape reed is used as sways, the last line of thatch shall be fixed with a 3.15mm galvanized wire sway. Where the 3.15mm wire is joined, allow wires to overlap by at least 200mm.	
14.2.2	The last line shall not be cut. The top ends of the grass shall be folded over the ridgepole and fixed to the opposite side, covering the thatch on the hip end of the roof. The batten installed 300mm above the last line of thatch shall be used to stitch down the opposite last layer of thatch on both sides of the roof.	
14.2.3	The thatch on the hip end of the roof shall be folded over the ridge pole and tied to the ridge pole and be stitched to the pole by means of a hook needle. <b>Note:</b> The above process is necessary to ensure that the last line of thatch does not slip out under the fibreglass ridging. This process will also prevent birds from pulling out the thatch.	
14.2.4	Two holes of 2mm diameter shall be punched or drilled into the bottom 50mm reinforced part of a suitable fibreglass ridging. The holes in the ridge shall not be spaced further than 200mm apart. 1.5mm galvanized wire is threaded through two holes, while the ridging is still on the ground.	



SATAS MS 78.4

14.2.5	Before the ridge is installed, the thatch and twine fixings shall be checked to make sure that it is tight and that the last lines of thatch are straight and in place. Bird mesh with a hole diameter of no more than 25mm shall be placed over the last line of thatch and shall extend at least 900mm from the centre of the ridge down to the overhang. This bird mesh shall also be stitched to the ridgepole to hold it in place, before installing the fibreglass ridge.	
14.2.6	Ridging shall be used in as long as possible sections, to reduce the use of joins.Ridging shall be placed loosely in its correct position and shall be tightly stuffed with loose bundles of grass. Care shall be taken to ensure that the ridging fits tightly to the top ridge pole in order to eliminate any further voids. After the ridge has been stuffed, the ridge shall be pulled down onto the thatch. Every third wire shall be pulled tight and tied to the last batten. The wire shall be stitched through the thatch at an angle to eliminate the water from following the fixing through the thatch. <b>NOTE</b> :By fixing it to the last batten, it is ensured that the fixing is under the fibreglass ridging and cannot be affected by the water.	
14.2.7	The covering where the thatch intersects with gable ends shall be purpose and enclose and protect the last two lines of thatch. These two lines of thatch shall also be double stitched and be covered with bird mesh under the fibreglass covering. When the ridge is aligned and level, the remaining wire fixing shall be tied down. The fixing shall then be covered with a small piece of chopped strand matt and resin from a	



SATAS MS 78.4

supplied join kit, to avoid the formation of rust. Where the fibreglass ridging joins it shall overlap a minimum of 75mm.		
The area where the ridging is joined, shall be sanded lightly to assist with bonding. Resin shall be applied to the joining area and a layer of chopped strand matt shall be placed over the resin. A second layer of resin shall be applied to the chopped strand matt.		
All ridging shall be covered with an acrylic based waterproof paint and this paint shall be re-applied to the areas which has been joined. <b>NOTE</b> :If the join is still visible it can be sanded and the water based acrylic pain can be re-applied		
750mm down each side. (one part common cement to		
Is the ridge constructed as per SANS 10407		
CHIMNEYS		
Is there a rational design		
Chimneys shall be designed and built using only non- combustible materials with suitable insulation properties equal to that of a solidly built 200mm thick masonry wall unless based on a rational design prepared by a competent person.		
	the fibreglass ridging joins it shall overlap a minimum of 75mm. The area where the ridging is joined, shall be sanded lightly to assist with bonding. Resin shall be applied to the joining area and a layer of chopped strand matt shall be placed over the resin. A second layer of resin shall be applied to the chopped strand matt. All ridging shall be covered with an acrylic based waterproof paint and this paint shall be re-applied to the areas which has been joined. <b>NOTE</b> :If the join is still visible it can be sanded and the water based acrylic pain can be re-applied <b>MORTAR RIDGES</b> The ridge capping shall be a 40mm thick not less than 750mm down each side. (one part common cement to four parts of sand) Is the ridge constructed as per SANS 10407 <b>CHIMNEYS</b> Is there a rational design Chimneys shall be designed and built using only non- combustible materials with suitable insulation properties equal to that of a solidly built 200mm thick masonry wall unless based on a rational design	the fibreglass ridging joins it shall overlap a minimum of 75mm.The area where the ridging is joined, shall be sanded lightly to assist with bonding. Resin shall be applied to the joining area and a layer of chopped strand matt shall be placed over the resin. A second layer of resin shall be applied to the chopped strand matt.All ridging shall be covered with an acrylic based waterproof paint and this paint shall be re-applied to the areas which has been joined.NOTE : If the join is still visible it can be sanded and the water based acrylic pain can be re-appliedMORTAR RIDGESThe ridge capping shall be a 40mm thick not less than 750mm down each side. (one part common cement to four parts of sand)Is the ridge constructed as per SANS 10407CHIMNEYSIs there a rational designChimneys shall be designed and built using only non- combustible materials with suitable insulation properties equal to that of a solidly built 200mm thick masonry wall unless based on a rational design



SATAS MS 78.4

16.3	All chimneys and flues penetrating thatch roofs shall be equipped with the spark arrestor located not less than 750mm from the exhaust.	
16.4	No combustible material (timber or thatch) shall penetrate the chimney and be closer than 200mm from the inside of the flue	
16.5	The exhaust aperture shall be at least 1m away from the point closest to the roof.	
16.6	The flashing material in the chimney which is in contact with the steel flue pipe shall not be in contact with the thatch layer.	
17	Accuracy	
17.1	King post max deviation 10mm per 1000mm	
17.2	Tie beams and rafters max deviation 50mm per 1000mm	
17.3	Poles max deviation measured in the central position between connections shall not exceed 25 mm	



SATAS MS 78.4

#### **OBSERVATIONS AND GENERAL COMMENTS**

#### **OPENING/CLOSING MEETING**

PERSONS PRESENT	COMPANY	OPENING	CLOSING