

HIP ROOF SHELTERS SCHEDULE

SHELTER TYPE	DIMENSIONS						POST HEIGHT H(m)	FASCIA Size in timber stress grade MGP12 G(mm)	No. of bridging equally spaced along fascia/purlin length				RIDGE 2/170x45 yes/no	APEX Connector Type (Refer sheet 7)	PURLINS		HIP RAFTER Size in timber stress grade MGP12 Q(mm)	POST C1		ANNEX			POST C2	
	A(m)	B(m)	C(m)	D(m)	E(m)	F(m)			Less than 1.5m	1.51m to 2.7m	2.71m to 5m	5.01m to 6m			Spacing	Size in timber stress grade MGP12*		Hot dip galv. grade 350	Stainless steel grade 316	Ground pad	Rafter spacing	Length of beam	Hot dip galvanised grade 350	Stainless steel grade 316
	Fascia/Purlin length														K(mm)	M(mm)				N(m)	L(m)	P(m)		
4x4	4.0	4.0	3.0	3.0	5.0	5.0	2.55	190x45	-	1	1	-	no	1	780	140x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
4x4+ANNEX	4.0	4.0	3.0	3.0	5.0	5.0	2.55	190x45	-	1	1	-	no	1	780	140x45	2/170x45	100x6 SHS	100x5 SHS	7.8	0.45	4.4	75x5 SHS	100x5 SHS
4x5	4.0	5.0	3.0	4.0	5.0	6.0	2.55	190x45	-	1	2	-	yes	2	780	140x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
4x5+ANNEX	4.0	5.0	3.0	4.0	5.0	6.0	2.55	190x45	-	1	2	-	yes	2	780	140x45	2/170x45	100x6 SHS	100x5 SHS	8.8	0.45	4.4	75x5 SHS	100x5 SHS
4x6	4.0	6.0	3.0	5.0	5.0	7.0	2.55	240x45	-	1	2	3	yes	2	780	*170x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
4x6+ANNEX	4.0	6.0	3.0	5.0	5.0	7.0	2.55	240x45	-	1	2	3	yes	2	780	*170x45	2/170x45	100x6 SHS	100x5 SHS	9.8	0.45	4.4	75x5 SHS	100x5 SHS
5x5	5.0	5.0	4.0	4.0	6.0	6.0	2.55	190x45	-	1	2	-	no	1	730	140x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
5x5+ANNEX	5.0	5.0	4.0	4.0	6.0	6.0	2.55	190x45	-	1	2	-	no	1	730	140x45	2/170x45	100x6 SHS	100x5 SHS	8.8	0.575	5.4	75x5 SHS	100x5 SHS
5x6	5.0	6.0	4.0	5.0	6.0	7.0	2.55	240x45	-	1	2	3	yes	2	730	*170x45	2/170x45	100x6 SHS	100x5 SHS	-	-	-	75x5 SHS	100x5 SHS
5x6+ANNEX	5.0	6.0	4.0	5.0	6.0	7.0	2.55	240x45	-	1	2	3	yes	2	730	*170x45	2/170x45	100x6 SHS	100x5 SHS	9.8	0.575	5.4	75x5 SHS	100x5 SHS

Provide bridging with 140x45 timber grade same as purlins

* For spans greater than 3750 provide 2/170x45 with 2 No. M16 bolts equally spaced along the purlin, c/w washers and nuts thru purlins.

STEELWORK NOTES

- ALL WORKMANSHIP & MATERIALS SHALL BE IN ACCORDANCE WITH AS4100 & AS/NZS1554.
- ALL STEEL SHALL BE IN ACCORDANCE WITH: AS1163 GRADE C350LO FOR RECTANGULAR AND SQUARE HOLLOW SECTIONS UNO
- ALL BOLTS TO BE METRIC HEXAGONAL TO AS 1252 U.N.O. ALL BOLTS TO BE M16 4.6/S TO AS/NZS 1252 U.N.O. ALL BOLTS TO BE HOT DIP GALVANISED TO AS 1214 U.N.O.
- ALL CLEATS AND GUSSETS SHALL BE 10mm PLATE TO AS/NZS3678 GRADE 250 U.N.O.
- METAL ROOF CLADDING TO BE 0.42 BMT LYSAGHT CUSTOM ORB WITH A COLORBOND FINISH OR APPROVED EQUAL FIXED AS PER MANUFACTURER'S SPECIFICATIONS - COLORBOND COLOUR AS PER SPECIFICATION. IN MARINE ENVIRONMENT, PROVIDE COLORBOND ULTRA FINISH OR APPROVED EQUAL.
- ALL WELDS TO BE 6mm CONTINUOUS FILLET WELDS (CFW) STRUCTURAL PURPOSE (SP) WELDS U.N.O. ALL WELDS TO BE MADE USING E48XX OR W50X GRADE 1 (OR BETTER) ELECTRODES TO AS/NZS 1554. GRIND ALL CORNERS & WELDS SMOOTH.
- ALL STEELWORK TO BE HOT DIP GALVANISED IN ACCORDANCE WITH AS/NZS 2312 HDG600 SPECIFICATION. CORROSION PROTECTION COATING TO SURFACE PREPARATION OF SUBSTRATE MATERIAL IS CLASS 2½ TO AS 1627 AND PICKLED PRIOR GALVANISING. HOT DIPPED GALVANISED COATING SHALL BE IN ACCORDANCE WITH AS/NZS 4680.

- ANY POST GALVANISING DAMAGE TO BE MADE GOOD WITH HIGH QUALITY TWO PACK EPOXY ZINC RICH PAINT CONFORMING TO AS/NZS 3750.9 WITH A MINIMUM DRY FILM THICKNESS OF 100 MICRONS. SURFACE PREPARATION TO BE ACCORDING TO PAINT MANUFACTURER'S RECOMMENDATIONS.
- THE ENDS OF ALL TUBULAR OR HOLLOW MEMBERS ARE TO BE SEALED WITH 6mm THICK PLATES AND CONTINUOUS FILLET WELDED U.N.O.
- PROTECTIVE COATINGS TO BE APPLIED AFTER ALL FABRICATION COMPLETED. NO WELDING ETC TO BE CARRIED OUT DURING OR AFTER APPLICATION OF COATING SYSTEM.
- THE PRINCIPAL CONTRACTOR SHALL CONFER WITH THE FABRICATOR AND GALVANISER TO ENSURE VENT HOLES ARE PROVIDED IN ACCORDANCE WITH AS/NZS 4680.
- FOR MARINE ENVIRONMENTAL ZONES (WITHIN 1km OF THE SHORELINE), ALL STEEL MEMBERS, FASTENERS, INCLUDING BOLTS, NUTS, AND CLEATS SHALL BE STAINLESS STEEL. PLASTIC SEPARATORS SHALL BE PROVIDED TO AVOID CONTACT BETWEEN DISSIMILAR MATERIALS. STAINLESS STEEL GRADE 316 TO BE USED.
- CO-ORDINATE WITH LIGHTNING PROTECTION DETAILS - REFER TO BSD-10133.

STAINLESS STEEL:

- BEFORE FABRICATION SUBMIT COPIES OF SHOP DRAWINGS FOR REVIEW. REVIEW DOES NOT INCLUDE DIMENSION CHECKING.
- STAINLESS STEEL MATERIAL SHALL NOT BE STORED WITH CARBON STEEL.
- TOOLS USED FOR CARBON STEEL SHALL NOT BE USED TO FABRICATE OR ASSEMBLE STAINLESS STEEL COMPONENTS.
- THE STAINLESS STEEL SHALL BE WRAPPED OR OTHERWISE PROTECTED DURING TRANSPORT TO AVOID CONTAMINATION BY FERROUS PRODUCTS.
- WELDING SHALL BE IN ACCORDANCE WITH AS1554.6.
- LIMIT THE INPUT OF HEAT INTO THE WELD. THE WELD SHALL NOT BE PREHEATED, POST-HEATED OR STRESS RELIEVED.
- GRADE 316L ELECTRODES SHALL BE USED FOR 316L.
- WELDS SHALL BE CATEGORY 2B IN ACCORDANCE WITH AS1554.6.
- SURFACE FINISHES OF WELDS SHALL BE GRADE 1, POLISHED USING 320 GRIT OR FINER, SILICONE CARBIDE ABRASIVES WITH LUBRICATION. AFTER POLISHING, WELDS SHALL BE PASSIVATED USING NITRIC ACID IN ACCORDANCE WITH ASTM A380.
- ALL STAINLESS STEEL COMPONENTS SHALL HAVE A Ra<0.5µm AND PASSIVATED USING NITRIC ACID IN ACCORDANCE WITH ASTM A380.
- CHEMICAL ANCHORS AND BOLTS TO BE GRADE 316 STAINLESS STEEL A4-50 MINIMUM.

STRUCTURAL DESIGN CERTIFICATION		
DESIGN Original signed by : L. Mendis RPEQ: 8950 - 2014.11.26	DESIGN CHECK Original signed by : D. Bateup RPEQ: 13095 - 2014.11.26	AUTHORISED FOR ISSUE Original signed by : B. Balakumar RPEQ: 3963 - 2014.11.27
BRISBANE CITY COUNCIL STANDARD DRAWING		
HIP ROOF SHELTER-PARK- STRUCTURAL NOTES (PAGE 2 OF 2) SHEET 2 OF 7		SCALE NOT TO SCALE DWG No. BSD-10131 ORIGINAL SIZE A3 REVISION C

DRAWING AUTHORISED FOR PUBLICATION I. CONDRIK AUTHORISED JUNE 2015				DESIGN	L.M.	DATE	Sept '14
ASSET ENGINEERING MANAGER STRATEGIC ASSET MANAGEMENT				DRAWN	G.B.	DATE	Sept '14
DESIGN APPROVED D. VAN DER WALLE APPROVED JUNE 2015				CHECKED	D.B.	DATE	Sept '14
SENIOR CO-ORDINATOR PARKS ASSET SERVICES BRANCH - FIELD SERVICES GROUP				DRAWING FILENAME	BSD-10131 (C) Hip roof shelter - Park - Structural notes (Page 2 of 2) - Sheet 2 of 7.dwg		
				ASSOCIATED PLANS	BSD-10131 SHEETS 1,3,4,5,6&7		



ISSUE	AMENDMENT	DRAWN DATE	CHK'D DATE	APPR'D DATE
C	Drawing Title Amended, Hip Roof Shelters Schedule (mm) to (m)	FEB '16	JUL '16	JUL '16
B	NOTE S13 ADDED - LIGHTNING PROTECTION	JUNE '15	JUNE '15	JUNE '15
A	ORIGINAL ISSUE	SEPT '14	SEPT '14	SEPT '14