STANDARD OF WELDING

BUTT WELD

SYMBOLS	BACK WELD TYPE	BACKING STRIP TYPE
I-TYPE	t ≦ 6mm. *1 :TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING	t ≦ 6mm. FB-25x8
V -TYPE	t ≦ 6mm. *1 :TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING; t/4 ≦ h ≦ 10mm.	6mm. ≦ t < 12mm.; 12mm. ≦ t; t/4 ≦ h ≦ 10mm. FB-25x8
V-TYPE	t ≦ 6mm. *1 :TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING	6mm. ≦ t < 12mm.; 12mm. ≦ t FB-25x8
K-TYPE	t ≦ 16mm. *1 :TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING; t/4 ≦ h ≦ 10mm.	END TABS; 30-50mm.; BACKING STRIP FB-25x9
X-TYPE	t ≦ 16mm. *1 :TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING	END TABS; BACKING STRIP FB-25x9

REINF. OF BUTT WELD

WIDTH OF BREAD B	THICKNESS OF REINF. h
B ≦ 15mm.	0.5mm. ≦ h ≦ 3mm.
15mm. ≦ B ≦ 25mm.	0.5mm. ≦ h ≦ 4mm.
25mm. ≦ B	0.5mm. ≦ h ≦ 4B/25[mm]

FILLET WELD

SYMBOLS	
	t < 6mm S = t; t ≧ 6mm S = t-2
	t ≦ 16 mm. 16 mm. < t; 6mm. ≦ S
S L-P	L ≦ 10S AND 40mm.

PIPE TO PIPE WELDS

WALL THICKNESS OF PIPE : 2 ≦ t ≦ 12mm.
ANGLE OF JOINT 30° ≦ Ø ≦ 90°
PIPE SIZE RATIO d/D ≦ 1/3

[A] S = 2t
[B] S = 2t
[C] S = 2t

FLARE WELDS

SYMBOLS	
	S = t; S = t
	S = Ø/2; 2Ø L≧5Ø 2Ø
	S= Ø/2; 2Ø L≧5Ø 2Ø

Notes on welding

1. All dimensions are in millimeters unless otherwise noted.
2. Standard of welding are applicable in case of manual or semi-automatic carbon-di-oxide gas sealed arc welding.
3. t = thickness of thinner plate.
4. S = size of fillet weld.
5. Unless otherwise noted on the drawings, the minimum size of fillet welds shall be the lesser of 6mm or thickness of the welded section.
6. For other types of weldings and other notations, see ÍST EN 22553:1994

GENERAL NOTES

Elevations are in metres in Hafnarfjordur elevation system

0.00 Stands for elevation 0,00 m on sections

0.00 Stands for elevation 0,00 m on plans

All dimensions shown are either metres or millimetres

SECTIONS:

Detail or section no. 12
12
105
Indicates location of section
Shown on DWG no. 105

END CONNECTIONS

– All major structural connections to be as per enlarged details (unless shown otherwise).

– The ends of all tubular sections are to be sealed by welding.

QUALITY CONTROL

1. Steel Shapes: Every batch of structural steel shapes delivered for fabrication shall have manufacturer's mill certificates showing their chemical and physical properties.

2. Weld Finish: The weld finish shall be free from undercuts, pinholes, cracks and applicable testing shall be conducted at welds.

3. Refer to contract Specifications for the other items.

Samþykkt þann 05. júlí 2012
Byggingafulltrúinn í Hafnarfirði
F.h. Hrólfur S. Gunnlaugsson

Revision no. X shown on drawing: Kt. 181144-3949

RX | RX | RX

MATERIAL SPECIFICATIONS

1. All structural steel works shall comply with ÍST EN 10025: 2004 or ÍST EN 10210: 2006 (hollow sections)

2. Where the contractor intends to provide alternative sections to those indicated on the drawings, he shall submit the necessary evidence that the minimum equivalent section properties are provided. This shall be subject to the approval of the Engineer prior to ordering of materials.

3. All bolts, nuts and washers shall be type 8.8 hot-dip galvanized and in accordance with ÍST EN ISO 4014, ÍST EN ISO 4032, ÍST EN ISO 7091 and ÍST EN ISO 898-1.

4. All welding shall conform to ÍST EN ISO 3834 and welding procedure shall conform to ÍST EN ISO 15614-1 and shall be witnessed by an accredited third party inspection and testing organization.

5. Metal stair, flooring, handrailing, etc., all as per Contract Specifications.

6. Purlins and girts shall comply with the requirement of ÍST EN 10147 S350GD hot dip galvanized.

APPLICABLE STANDARDS

1. See IDP-814-ST-000-007 Standard Technical Specification Structural Steel, Supply and Fabrication

2. See IDP-814-ST-000-008 Standard Technical Specification, Structural Steel, Erection

SURFACE TREATMENT AND PAINTING

1. Corrosion class shall be C5-M according to ÍST-EN-ISO-12944-2:1998. See also IDP-814-ST-000-011 Standard Technical Specification – Surface Treatment and Corrosion Protection

TIGHTENING OF BOLTS (CLASS 8.8)

BOLT diameter (mm)	TORQUE (Nm)
10	50 ± 10
12	90 ± 10
16	220 ± 10
20	420 ± 20
24	720 ± 20
27	1050 ± 20
30	1450 ± 20

The values in the table do apply, when not otherwise stated on the drawings, or in absence of comparable information from bolt supplier.
The table does not apply for high strength bolts in slip resistant connections.

Skýringar:
Legend:

Ug nr Rev no	Lýsing Description	Dagsetning Date	Hann/Tkn Des/Drw	Yfirf Chd	Nokk heim Suppl Rel	Nokk heim ISAL Rel
5	Issue for construction	2012-04-27	IAJ	NI	JF	

Stærð/Format: A1 Mkv./Scale: -
Dimensions without tolerances according to ISO 2768-1 medium.

HRV HATCH JOINT VENTURE ISAL PRODUCTION UPGRADE

Dagsetning / Date	2011-10-21
Hannað / Designed	IAJ/GM
Teikn / Drawn	IAJ/GM
Verktaki / Supplier	HRV
Teikn.nr.verktaka / Supplier drw.no.	IPU-321-ZA-208-100
Samþ.vkkt / Approved	NI
Yfirf / Chkd	NI
Hlutí af: / Part of:	

IPU - 321 ALUMINIA
DP0 AND DPS1, 2, 3 & 4
GENERAL NOTES
Teg.teikningar / Dwg. type: STRUCTURAL STEEL

Rio Tinto Alcan — ÍSAL, Alcan Iceland Ltd, Straumsvík, IS-222 Hafnarfjörður, Iceland

ÍSAL Yfirfarið og skráð, dags / ÍSAL Checked, date
ÍSAL Samþykkt, dags / ÍSAL Approved, date

Flokkur nr.:	Blað nr.:	Næsta bl.nr.:
Kostn.nr.-Ccno. / Bún.nr.-Eq.no		
AKS		
Teikn.nr. ÍSAL /Drw.no. of ÍSAL		Breyt./Rev. C

C:\IDP\04 IPU\300 Raw Material and Finished Products\320 Handling and Storage – Port\321 Alumina\Drawings\Revit\IPU-321-ZA-208-100.dwg