

**STANDARD OF WELDING**

BUTT WELD		FILLET WELD	
SYMBOLS	BACK WELD TYPE	BACKING STRIP TYPE	SYMBOLS
I-TYPE	$t \leq 6\text{mm}$ . *1 : TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING 	$t \leq 6\text{mm}$ . 	
V-TYPE	$t \leq 6\text{mm}$ . *1 : TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING 	$6\text{mm} \leq t < 12\text{mm}$ . 	$t < 6\text{mm} \quad S=t$ $t \geq 6\text{mm} \quad S=t-2$ 
V-TYPE	$t \leq 6\text{mm}$ . *1 : TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING 	$6\text{mm} \leq t < 12\text{mm}$ . 	$t \leq 16\text{mm}$ . $16\text{mm} < t$ $6\text{mm} \leq S$ 
K-TYPE	$t \leq 16\text{mm}$ . *1 : TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING 	END TABS 	PIPE TO PIPE WELDS 
X-TYPE	$t \leq 16\text{mm}$ . *1 : TO BE BACK WELDED AFTER BACK CHIPPING OF PRIMARY WELDING 	REINF. OF BUTT WELD 	WALL THICKNESS OF PIPE : $2 \leq t \leq 12\text{mm}$ . ANGLE OF JOINT $30^\circ \leq \theta \leq 90^\circ$ PIPE SIZE RATIO $\frac{d}{D} \leq \frac{1}{3}$ 

WIDTH OF BREAD		THICKNESS OF REINF. h	
$B \leq 15\text{mm}$	$0.5\text{mm} \leq h \leq 3\text{mm}$	$15\text{mm} \leq B \leq 25\text{mm}$	$0.5\text{mm} \leq h \leq 4\text{mm}$
$25\text{mm} \leq B$	$0.5\text{mm} \leq h \leq 4B/25(\text{mm})$		

FLARE WELDS	
SYMBOLS	

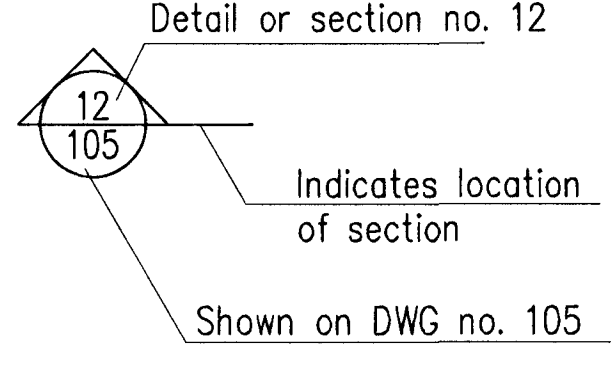
**Notes on welding**

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

**GENERAL NOTES**

- Elevations are in metres in Hafnarfjordur elevation system
- Stands for elevation 0,00 m on sections
- Stands for elevation 0,00 m on plans
- All dimensions shown are either metres or millimetres

**SECTIONS:**



**END CONNECTIONS**

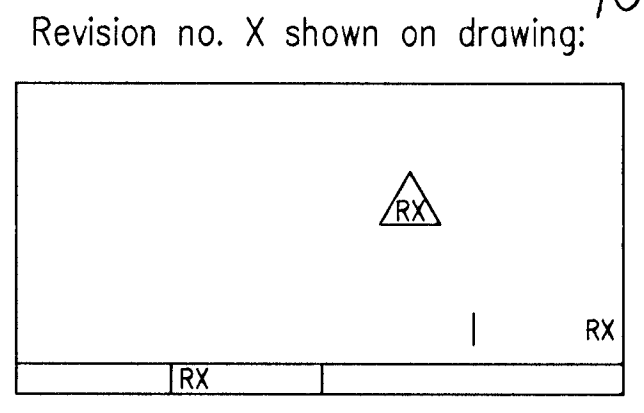
- All major structural connections to be as per enlarged details (unless shown otherwise).
- The ends of all tubular sections are to be sealed by welding.

**QUALITY CONTROL**

- Steel Shapes: Every batch of structural steel shapes delivered for fabrication shall have manufacturer's mill certificates showing their chemical and physical properties.
- Weld Finish: The weld finish shall be free from undercuts, pinholes, cracks and applicable testing shall be conducted at welds.
- Refer to contract Specifications for the other items.

Samþykkt þann  
05. júlí 2012  
Byggingafræðingur / Hafnarfjörður  
Eh. Höfðakúrs S. Gunnlaugsson

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



**MATERIAL SPECIFICATIONS**

- All structural steel works shall comply with IST EN 10025:2004 or IST EN 10210:2006 (hollow sections)
- 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.
- All bolts, nuts and washers shall be type 8.8 hot-dip galvanized and in accordance with IST EN ISO 4014, IST EN ISO 4032, IST EN ISO 7091 and IST EN ISO 898-1.
- All welding shall conform to IST EN ISO 3834 and welding procedure shall conform to IST EN ISO 15614-1 and shall be witnessed by an accredited third party inspection and testing organization.
- Metal stair, flooring, handrailing, etc., all as per Contract Specifications.
- Purlins and girts shall comply with the requirement of IST EN 10147 S350GD hot dip galvanized.

**APPLICABLE STANDARDS**

- See IDP-814-ST-000-007 Standard Technical Specification Structural Steel, Supply and Fabrication
- See IDP-814-ST-000-008 Standard Technical Specification, Structural Steel, Erection

**SURFACE TREATMENT AND PAINTING**

- Corrosion class shall be C5-M according to IST-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)	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.
10	50 ± 10	
12	90 ± 10	
16	220 ± 10	
20	420 ± 20	
24	720 ± 20	
27	1050 ± 20	
30	1450 ± 20	

Skýringar:  
Legend:

Utg. / Rev. no.	Dagur / Date	Lýsing / Description	Útdráttur / Drawn	Yfir / Checked	Nett. / Net	Nett. / Net	Nett. / Net
5	2012-04-27	Issue for construction	IAJ	Ni	JF		

This drawing is the property of Rio Tinto Alcan. Iceland Ltd. and handed out for personal use only. It may neither be copied nor made available to others without permission of Rio Tinto Alcan. Iceland Ltd. The receiver is liable for any misuse.		HRV HATCH REAL PRODUCTION UPGRADER		Dispersing / Date: 2011-10-21 Hámaður / Designed: IA/JGM Tolkur / Drawn: IA/JGM Vertikal / Supplier: HRV Töku nr. verkefils / Supplier drw. no.: IPU-321-ZA-208-100 Samþykkt / Approved: IA/JGM Hluti af / Part of:		IPU-321 ALUMINIA DP0 AND DPS1, 2, 3 & 4 GENERAL NOTES Tegu tekið / Drawn type: STRUCTURAL STEEL  ISAL Alcan Iceland Ltd. Straumsvík IS-222 Hafnarfjörður Ísland		Flakkur nr.: Blað nr.: Nasta bl. nr.: Kosi nr. / Cons. / Bl. nr. / Eq. no. AKS Töku nr. ISAL. Örn no. of ISAL: Breyt / Rev.: C	
				ISAL. Samþykkt. dag / ISAL. Approval, date		ISAL. Samþykkt. dag / ISAL. Approval, date			