



Project Name

INSPECTION TEST PLAN STRUCTURAL STEEL WORK

1A					
Rev #	Date	Prepared By	Reviewed By	Approved By	Remarks

Revision	Revision History
1A	First Issue

Before Starting the Project, Ensure all relevant specifications are copied from tender drawings and attached to this ITP.

INSPECTION TEST PLAN STRUCTURAL STEEL WORK

Prepared By

Lee West

ITP No:

TEG-007

Rev: No:

1A

LEGEND: XXX – Fabrication Manager

YYY – Technical / Project Manager

ZZZ – Independent Inspector

R – REVIEW / S - SURVEILLANCE

W- WITNESS / H – HOLD POINT

No	Activity	Inspection			Frequency	XXX In Charge	Acceptance Criteria	Verifying Documents
		XXX	YYY	ZZZ				
1	SHOP DRAWINGS							
1a	Issued for Construction drawings received					QS	IFC drawings received and reviewed against Tender Documents	IFC Drawings
1b	Shop drawings issued for Approval					PM	In accordance to contract specs, design requirements, drawings	Issued for Approval Drawings
1c	Shop drawings issued for Fabrication					PM	Should be complying with BOQ and tender conditions	Issued for Construction Drawings
2	INCOMING MATERIALSa							
2a	Steel profiles					Fab		Manufactures test certificates 3 rd party test reports
2b	Plate					Fab	Ordered as per BOQ, as per tender specifications and supplied mill certificates	
2c	Purlins					Fab	Ordered as per BOQ, as per tender specifications and supplied mill certificates	
2d	Bolts & Fastenings					Tech / PM	Ordered as per bolt list, as per tender specifications and supplied mill certificates	
2e	Consumables					Fab / Tech / PM	As per tender specifications and supplied mill certificates	

No	Activity	Inspection			Frequency	XXX In Charge	Acceptance Criteria	Verifying Documents
		XXX	YYY	ZZZ				
3	FABRICATION							
3a	Fabricate to supplied approved drawings					Fab	All pre-fabricated materials to be as per spec.; approved drawings and details and free from damages and rust.	Inspection, Checklist Individual QA Sheet
3b	Inspection complete					Fab	Welding inspected in line with required procedures and standards	
3c	Galvanising					Fab	Galvanising complete as per required specification	Galvanising Certificate Warranty
3d	Painting / Priming					Fab	Galvanising complete as per required specification	Painting Certificate / Warranty
4	PRE-ERECTION							
4a	Check for bench marks					Tech	Permanant bench mark for reference to be available.	Inspection, Checklist
4b	Check on foundations					Tech	Foundations are to be cast as per approved drawings and in correct orientations	
4c	Check on levels and distances of foundations					Tech	Top level of the foundation wrt bench marks and centre to centre distance and diagonal distance are as per approved details.	

No	Activity	Inspection			Frequency	XXX In Charge	Acceptance Criteria	Verifying Documents
		XXX	YYY	ZZZ				
5	ERECTION IN PROGRESS							
5a	Check on columns erection					Tech	Interchanging and turning of columns by 180 degrees to be avoided.	Inspection, Checklist
5b	Check on alignment of columns					Tech	Columns are to be properly oriented and centre line of base plate to be coincide with foundation pedestal axis. Foundation bolts to be properly tightened with lock nut	
5c	Check for erection of horizontal beams, girders and vertical bracings					Tech	First piece of all columns are to be erected and aligned first. Pieces which affects the movement of crane or other equipment to be erected only at appropriate time.	
5d	Check on bolting					Tech	Bolts to be of proper size and to be tightened properly as per bolt tightening procedure.	
5e	Check on erection of interconnecting members					Tech	All remaining members to be erected as per the drawing and details providing facility to movement of crane and other equipment.	
5f	Check on welders					Tech	All welders to be have qualified welder Certificate or to be approved by performing test at site.	
5g	Check on welding materials					Tech	All welding consumables to be available as per the approved details	
5h	Check for pre heating					Tech	All joints to be pre heated by approved method by maintaining uniform temperature	
5i	Check for fit up of joints					Tech	Minimum gap to be maintained for fillet welding.	
5j	Check for assembly of welding parts					Tech	All parts to be welded shall be arranged so as to fit properly on assembly.	
5k	Check for post weld heat treatment					Tech	To be done as applicable using appropriate heating method by maintaining uniform temperature.	

No	Activity	Inspection			Frequency	XXX In Charge	Acceptance Criteria	Verifying Documents
		XXX	YYY	ZZZ				
6	POST ERECTION							
6a	Check on columns and other members					PM	Total erected columns to be vertical within the tolerance as per spec All other members to be vertical or horizontal as the case may be within tolerance as per spec/standard	Inspection, Checklist
6b	Check on weld surface & Size					PM	All welds to be cleaned, overlap / excess weld metal to be removed by grinding. Weld size not to be less than specified.	
6c	Check on welding					PM	All welding to be free from surface cracks, blow holes, infused welds, improper welding profile and misalignment of welded parts etc:	
6d	Testing of welds					PM	Tests to be done for required no.: of welds as per specification	
6e	Check for repair of faulty welds					PM	Defective weld to be removed up to the sound metal and parent metal is free from damage.	
6f	Check for re weld and retest					PM	To be done by using the same procedure and methods.	
6g	Check on tolerances					PM	All tolerance to be within the limit specified	
6h	Check on grouting					PM	After all erections are approved. Grouting to be done as per the approved method after cleaning and clearing of all dust, mud, water, oil and other unwanted material by using approved material.	
6i	Check on painting					PM	Painting to be carried out as per specifications	

No	Activity	Inspection			Frequency	XXX In Charge	Acceptance Criteria	Verifying Documents
		XXX	YYY	ZZZ				
7	CLOSEOUT							
7a	Site diaries					PM	All site diaries compiled in QA folder	Inspection, Checklist
7b	Internal Inspection reports					PM	All internal reports including fabrication, surface treatment, and erection compiled in QA folder	
7c	Independent Inspection reports					PM	All Independent Weld Certificates compiled in QA folder	
7d	Mill Certs					PM	All Mill Certs compiled in QA folder	
7e	As Built Drawings					PM	Shop Drawings confirmed as acceptable and supplied to relevant parties	
7f	Producer Statements					PM	Producer Statements completed and in QA folder	
7g	Client acceptance					PM	Correspondence of acceptance compiled in QA folder	

						Client		Project					
INSPECTION CHECKLIST													
STRUCTURAL STEEL WORK-ERECTION													
ITP		Structural Steel		Inspection No.						Location			
Prepared by						Applicable Drawing							
#	Description	Result	Date	Sign		#	Description	Result	Date	Sign			
				XXX	YYY					XXX	YYY		
3	FABRICATION					6	POST ERECTION						
3a	Inspection complete					6a	Check on columns and other members						
4	PRE-ERECTION					6b	Check on weld surface & Size						
4a	Check for bench marks					6c	Check on welding						
4b	Check on foundations					6d	Testing of welds						
4c	Check on levels and distances of foundations					6e	Check for repair of faulty welds						
5	ERECTION IN PROGRESS					6f	Check for re weld and retest						
5a	Check on columns erection					6g	Check on tolerances						
5b	Check on alignment of columns					6h	Check on grouting						
5c	Check for erection of horizontal beams, girders and vertical bracings					6i	Check on painting						
5d	Check on bolting					7	CLOSEOUT						
5e	Check on erection of interconnecting members					7a	Site Diaries						
5f	Check on welders					7b	Internal Inspection reports						
5g	Check on welding materials					7c	Independent Inspection reports						
5h	Check for pre heating					7d	Mill Certs						
5i	Check for fit up of joints					7e	As Built Drawings						
5j	Check for assembly of welding parts					7f	Producer Statements						
5k	Check for post weld heat treatment					7g	Client Acceptance						

CONCLUSION	<input type="checkbox"/> Accepted <input type="checkbox"/> Accepted with Comments <input type="checkbox"/> Rejected		
COMMENTS			

	XXX (Contractor)	YYY (Consultant)	Client
Name			
Sign			
Date			