SAUDI
BILDA

SAUDIBILDA

scaffolding

INTRODUCTION

Saudi Bilda scaffolding Company started work year 2004 and it is one of AL- Areedh Group.

Before 10 years, Saudi Bilda Scaffolding Company had 2500 square meter Work shop. This Workshop is not enough to fulfill the market desire because of maximum orders.

So, Saudi Bilda Built factory (year2014) to capture the Middle East. Saudi Bilda Factory have total 22500 meter square . First production 18000 ton per year and within two years it will be 50000 ton per year. We have Professional engineers to prepare the Internal and external Scaffolding Designs. We have professional and technical persons to control the automation machines and quality control.

Saudi Bilda Scaffolding Company has goodwill because of good quality, good price and commitments

SB-001	Spigotless Standard 4.00 m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-002	Spigotless Standard 3.00 m	
SB-003	Spigotless Standard 2.50 m	
SB-004	Spigotless Standard 2.30 m	
SB-005	Spigotless Standard 2.00 m	
SB-006	Spigotless Standard 1.80 m	
SB-007	Spigotless Standard 1.50 m	
SB-008	Spigotless Standard 1.30 m	
SB-009	Spigotless Standard 1.00 m	
SB-015	Ledger - Transom 3.00 m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-016	Ledger - Transom 2.50 m	
SB-017	Ledger - Transom 1.80 m	
SB-018	Ledger - Transom 1.60 m	
SB-019	Ledger - Transom 1.30 m	
SB-020	Ledger - Transom 1.20 m	
SB-021	Ledger - Transom 1.00 m	
SB-022	Ledger - Transom 0.90 m	
SB-023	Ledger - Transom 0.80 m	
SB-024	Ledger - Transom 0.60 m	
SB-029	U - head 860 mm	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-030	U - head 660 mm	
SB-031	U - head 440 mm	
SB-032	Base Jack 860mm	
SB-033	Base Jack 660mm	
SB-034	Base Jack 440mm	
SB-035	Universal Jack Stem 860mm.	
SB-036	Universal Jack Stem 660mm.	

SB-036	Universal Jack Stem 660mm.	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-037	Universal Jack Stem 440mm.	
SB-038	Cantilever A Frame 1.5m. Lift	
SB-039	Cantilever A Frame 1.0m. Lift	
SB-040	Drop Beam Bracket (1.0m Lift)	
SB-043	Primary Aluminum Beam - 6.00 m	
SB-045	Primary Aluminum Beam - 5.00 m	
SB-047	Primary Aluminum Beam - 4.50 m	
SB-048	Primary Aluminum Beam - 4.40 m	
SB-050	Primary Aluminum Beam - 4.00 m	
SB-054	Primary Aluminum Beam - 3.50 m	
SB-057	Primary Aluminum Beam - 3.00 m	
SB-061	Primary Aluminum Beam - 2.50 m	
SB-065	Primary Aluminum Beam - 2.00 m	
SB-069	Primary Aluminum Beam - 1.50 m	
SB-072	Primary Aluminum Beam - 1.0 m	
SB-084	Secondary Aluminum Beam - 6.00 m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-086	Secondary Aluminum Beam - 5.00 m	
SB-088	Secondary Aluminum Beam - 4.50 m	
SB-091	Secondary Aluminum Beam - 4.00 m	
SB-095	Secondary Aluminum Beam - 3.50 m	
SB-099	Secondary Aluminum Beam - 3.00 m	
SB-103	Secondary Aluminum Beam - 2.50 m	
SB-107	Secondary Aluminum Beam - 2.00 m	
SB-111	Secondary Aluminum Beam - 1.50 m	
SB-115	Secondary Aluminum Beam - 1.00 m	
SB-124	4.0mm Galvanised Scaffold Tube 6.00m	

SB-125	4.0mm Galvanised Scaffold Tube 5.50 m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-126	4.0mm Galvanised Scaffold Tube 5.00 m	
SB-127	4.0mm Galvanised Scaffold Tube 4.50 m	
SB-128	4.0mm Galvanised Scaffold Tube 4.00 m	
SB-129	4.0mm Galvanised Scaffold Tube 3.50 m	
SB-130	4.0mm Galvanised Scaffold Tube 3.00 m	
SB-131	4.0mm Galvanised Scaffold Tube 2.50 m	
SB-132	4.0mm Galvanised Scaffold Tube 2.00 m	
SB-133	4.0mm Galvanised Scaffold Tube 1.50 m	
SB-134	4.0mm Galvanised Scaffold Tube 1.00 m	
SB-140	4.0mm Scaffold Tube 6.00m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-141	4.0mm Scaffold Tube 5.50m	
SB-142	4.0mm Scaffold Tube 5.00m	
SB-143	4.0mm Scaffold Tube 4.50m	
SB-144	4.0mm Scaffold Tube 4.00m	
SB-145	4.0mm Scaffold Tube 3.50m	
SB-146	4.0mm Scaffold Tube 3.00m	
SB-147	4.0mm Scaffold Tube 2.50m	
SB-148	4.0mm Scaffold Tube 2.00m	
SB-149	4.0mm Scaffold Tube 1.50m	
SB-150	4.0mm Scaffold Tube 1.00m	
SB-154	3.2mm Galvanised Scaffold Tube 6.00m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-155	3.2mm Galvanised Scaffold Tube 5.50 m	
SB-156	3.2mm Galvanised Scaffold Tube 5.00 m	
SB-157	3.2mm Galvanised Scaffold Tube 4.50 m	
SB-158	3.2mm Galvanised Scaffold Tube 4.00 m	
SB-159	3.2mm Galvanised Scaffold Tube 3.50 m	

SB-160	3.2mm Galvanised Scaffold Tube 3.00 m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-161	3.2mm Galvanised Scaffold Tube 2.50 m	
SB-162	3.2mm Galvanised Scaffold Tube 2.00 m	
SB-163	3.2mm Galvanised Scaffold Tube 1.50 m	
SB-164	3.2mm Galvanised Scaffold Tube 1.00 m	
SB-168	3 mm Scaffold Tube 6.00m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-169	3 mm Scaffold Tube 5.50 m	
SB-170	3 mm Scaffold Tube 5.00 m	
SB-171	3 mm Scaffold Tube 4.50 m	
SB-172	3 mm Scaffold Tube 4.00 m	
SB-173	3 mm Scaffold Tube 3.50 m	
SB-174	3 mm Scaffold Tube 3.00 m	
SB-175	3 mm Scaffold Tube 2.50 m	
SB-176	3 mm Scaffold Tube 2.00 m	
SB-177	3 mm Scaffold Tube 1.50 m	
SB-178	3 mm Scaffold Tube 1.00 m	
SB-182	3 mm Galvanised Scaffold Tube 6.00m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-183	3 mm Galvanised Scaffold Tube 5.50 m	
SB-184	3 mm Galvanised Scaffold Tube 5.00 m	
SB-185	3 mm Galvanised Scaffold Tube 4.50 m	
SB-186	3 mm Galvanised Scaffold Tube 4.00 m	
SB-187	3 mm Galvanised Scaffold Tube 3.50 m	
SB-188	3 mm Galvanised Scaffold Tube 3.00 m	
SB-189	3 mm Galvanised Scaffold Tube 2.50 m	
SB-190	3 mm Galvanised Scaffold Tube 2.00 m	
SB-191	3 mm Galvanised Scaffold Tube 1.50 m	
SB-192	3 mm Galvanised Scaffold Tube 1.00 m	

SB-196	3.2mm Scaffold Tube 6.00 m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-197	3.2mm Scaffold Tube 5.50 m	
SB-198	3.2mm Scaffold Tube 5.00m	
SB-199	3.2mm Scaffold Tube 4.50m	
SB-200	3.2mm Scaffold Tube 4.00 m	
SB-201	3.2mm Scaffold Tube 3.50 m	
SB-202	3.2mm Scaffold Tube 3.00 m	
SB-203	3.2mm Scaffold Tube 2.50 m	
SB-204	3.2mm Scaffold Tube 2.00 m	
SB-205	3.2mm Scaffold Tube 1.50 m	
SB-206	3.2mm Scaffold Tube 1.00 m	
SB-210	Intermediate Transom 2.50 m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-211	Intermediate Transom 1.80 m	
SB-212	Intermediate Transom 1.60 m	
SB-213	Intermediate Transom 1.30 m	
SB-214	Intermediate Transom 1.20 m	
SB-215	Corian Standard Fram 2mm 1.7mx1.25m	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-216	Walk Corian Standard Fram	
SB-218	Inside Board Transom (3 board)	
SB-219	Inside Board Transom (2 board)	
SB-220	Inside Board Transom (1 board)	
SB-221	H20 Beam 5.90m	
SB-222	H20 Beam 3.90m	
SB-223	H20 Beam 2.90m	
SB-224	H20 Beam 1.90m	
SB-225	(LVL) Scaffold Board 4.00 m	
SB-226	(LVL) Scaffold Board 3.00 m	

SB-227	(LVL) Scaffold Board 2.50 m	
SB-228	(LVL) Scaffold Board 2.00 m	
SB-229	(LVL) Scaffold Board 1.50 m	
SB-230	(LVL) Scaffold Board 1.00 m	
SB-235	Light Duty Props - 2mm (Range : 2.45m - 3.9m)	ASTM designation A36 GRAED 36 fy (ksi)36 fu(58-80
SB-236	Medium Duty Props - 3.2mm (Range : 3.1m - 5.6m)	
SB-237	Spigot Castor wheel (Rubber)	
SB-238	Spigot Castor wheel (Steel)	
SB-239	Pressed Single / Putlog Coupler	
SB-240	Pressed Joint Pin	
SB-241	Pressed Sleeve Coupler	
SB-242	Pressed Stair Case Coupler	
SB-243	Girder Coupler	
SB-244	Base plate	
SB-245	Right Angle Coupler	
SB-246	Fence Coupler	
SB-247	Drop Hrad	
SB-248	Jack Nut	
SB-249	Tie Rod	
SB-250	Support Clamp	
SB-251	Staircase Coupler	
SB-252	Prop Nut	
SB-253	Locking Pin	
SB-254	Prop Sleeve	
SB-255	Loose Spigot connector	
SB-256	Universal Clamps	
SB-257	Double Coupler	

SAP2000®

License #

SAP2000 Analysis Report

Prepared by

Saudi Bilda Co.

Model Name: 1.sdb

Contents

List of Figures

List of Tables

1. Model geometry

This section provides model geometry information, including items such as joint coordinates, joint restraints, and element connectivity.

Figure 1: Finite element model

1.1. Joint coordinates

Table 1: Joint Coordinates

Table 1: Joint Coordinates

Joint	CoordSys	CoordType	GlobalX	GlobalY	GlobalZ
			m	m	m
1	GLOBAL	Cartesian	0.00000	0.00000	0.00000
2	GLOBAL	Cartesian	0.00000	0.00000	3.00000

1.2. Joint restraints

Table 2: Joint Restraint Assignments

Table 2: Joint Restraint Assignments

Joint	U1	U2	U3	R1	R2	R3
1	Yes	Yes	Yes	No	No	No
2	Yes	Yes	No	No	No	No

1.3. Element connectivity

Table 3: Connectivity - Frame

Table 3: Connectivity - Frame

Frame	JointI	JointJ	Length
			m
1	1	2	3.00000

Table 4: Frame Section Assignments

Table 4: Frame Section Assignments

Frame	AnalSect	DesignSect	MatProp
1	CHCF48.3X3	CHCF48.3X3	Default

2. Material properties

This section provides material property information for materials used in the model.

Table 5: Material Properties 02 - Basic Mechanical Properties

Table 5: Material Properties 02 - Basic Mechanical Properties

Material	UnitWeight KN/m3	UnitMass KN-s2/m4	E1 KN/m2	G12 KN/m2	U12	A1 1/C
4000Psi	2.3563E+01	2.4028E+00	24855578.28	10356490.95	0.200000	9.9000E-06
A992Fy50	7.6973E+01	7.8490E+00	199947978.8	76903068.77	0.300000	1.1700E-05

Table 6: Material Properties 03a - Steel Data

Table 6: Material Properties 03a - Steel Data

Material	Fy KN/m2	Fu KN/m2	FinalSlope
A992Fy50	248220.00	4481593.00	-0.100000

Table 7: Material Properties 03b - Concrete Data

Table 7: Material Properties 03b - Concrete Data

Material	Fc KN/m2	FinalSlope
4000Psi	27579.03	-0.100000

3. Section properties

This section provides section property information for objects used in the model.

3.1. Frames

Table 8: Frame Section Properties 01 - General, Part 1 of 4

Table 8: Frame Section Properties 01 - General, Part 1 of 4

SectionName	Material	Shape	t3	I23	tw	Area	TorsConst	I33
			m	m4	m	m2	m4	m4
CHCF48.3X3	A992Fy50	Pipe	0.048300	0.000000	0.003000	0.000427	2.200E-07	1.100E-07

Table 8: Frame Section Properties 01 - General, Part 2 of 4

Table 8: Frame Section Properties 01 - General, Part 2 of 4

SectionName	I22	AS2	AS3
	m4	m2	m2
CHCF48.3X3	1.100E-07	0.000235	0.000235

Table 8: Frame Section Properties 01 - General, Part 3 of 4

Table 8: Frame Section Properties 01 - General, Part 3 of 4

SectionName	S33	S22	Z33	Z22	R33	R22
	m3	m3	m3	m3	m	m
CHCF48.3X3	4.555E-06	4.555E-06	6.170E-06	6.170E-06	0.016050	0.016050

Table 8: Frame Section Properties 01 - General, Part 4 of 4

Table 8: Frame Section Properties 01 - General, Part 4 of 4

SectionName	AMod	A2Mod	A3Mod	JMod	I2Mod	I3Mod	MMod	WMod
CHCF48.3X3	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000

Table 9: Frame Property Modifiers, Part 1 of 2

Table 9: Frame Property Modifiers, Part 1 of 2

Frame	AMod	AS2Mod	AS3Mod	JMod	I22Mod	I33Mod	MassMod	WeightMod	EAModifier
1	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	1.000000	0.800000

Table 9: Frame Property Modifiers, Part 2 of 2

Table 9: Frame Property Modifiers, Part 2 of 2

Frame	EIModifier
1	0.800000

4. Load patterns

This section provides loading information as applied to the model.

4.1. Definitions

Table 10: Load Pattern Definitions

Table 10: Load Pattern Definitions

LoadPat	DesignType	SelfWtMult	AutoLoad
DEAD	DEAD	1.000000	
live	LIVE	0.000000	

5. Load cases

This section provides load case information.

5.1. Definitions

Table 11: Load Case Definitions

Table 11: Load Case Definitions

Case	Type	InitialCond	ModalCase	BaseCase	DesActOpt	DesignAct
DEAD	LinStatic	Zero			Prog Det	Non-Composite
MODAL	LinModal	Zero			Prog Det	Other
live	LinStatic	Zero			Prog Det	Short-Term Composite

5.2. Static case load assignments

Table 12: Case - Static 1 - Load Assignments

Table 12: Case - Static 1 - Load Assignments

Case	LoadType	LoadName	LoadSF
DEAD	Load pattern	DEAD	1.000000
live	Load pattern	live	1.000000

5.3. Response spectrum case load assignments

Table 13: Function - Response Spectrum - User

Table 13: Function - Response Spectrum - User

Name	Period	Accel	FuncDamp
	Sec		
UNIFRS	0.000000	1.000000	0.050000

Table 13: Function - Response Spectrum - User

Name	Period	Accel	FuncDamp
	Sec		
UNIFRS	1.000000	1.000000	

6. Load combinations

This section provides load combination information.

Table 14: Combination Definitions

Table 14: Combination Definitions

ComboName	ComboType	CaseName	ScaleFactor
DSTL1	Linear Add	DEAD	1.400000
DSTL2	Linear Add	DEAD	1.200000
DSTL2		live	1.600000
DSTL3	Linear Add	DEAD	1.000000
DSTL4	Linear Add	DEAD	1.000000
DSTL4		live	1.000000

7. Structure results

This section provides structure results, including items such as structural periods and base reactions.

Figure 2: Deformed shape

7.1. Mass summary

Table 15: Assembled Joint Masses

Table 15: Assembled Joint Masses

Joint	MassSource	U1	U2	U3	R1	R2	R3
		KN-s2/m	KN-s2/m	KN-s2/m	KN-m-s2	KN-m-s2	KN-m-s2
1	MSSSRC1	5.027E-03	5.027E-03	5.027E-03	0.0000	0.0000	0.0000
2	MSSSRC1	5.027E-03	5.027E-03	5.027E-03	0.0000	0.0000	0.0000

7.2. Base reactions

Table 16: Base Reactions

Table 16: Base Reactions

OutputCase	GlobalFX	GlobalFY	GlobalFZ	GlobalMX	GlobalMY	GlobalMZ
	KN	KN	KN	KN-m	KN-m	KN-m
DEAD	0.000	0.000	18.099	0.0000	0.0000	0.0000
live	0.000	0.000	18.000	0.0000	0.0000	0.0000

8. Joint results

This section provides joint results, including items such as displacements and reactions.

Table 17: Joint Displacements

Table 17: Joint Displacements

Joint	OutputCase	U1	U2	U3	R1	R2	R3
		m	m	m	Radians	Radians	Radians
1	DEAD	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
1	live	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	DEAD	0.000000	0.000000	-0.000793	0.000000	0.000000	0.000000
2	live	0.000000	0.000000	-0.000791	0.000000	0.000000	0.000000

Table 18: Joint Reactions

Table 18: Joint Reactions

Joint	OutputCase	F1	F2	F3	M1	M2	M3
		KN	KN	KN	KN-m	KN-m	KN-m
1	DEAD	0.000	0.000	18.099	0.0000	0.0000	0.0000
1	live	0.000	0.000	18.000	0.0000	0.0000	0.0000
2	DEAD	0.000	0.000	0.000	0.0000	0.0000	0.0000
2	live	0.000	0.000	0.000	0.0000	0.0000	0.0000

9. Frame results

This section provides frame force results.

Table 19: Element Forces - Frames, Part 1 of 2

Table 19: Element Forces - Frames, Part 1 of 2

Frame	Station	OutputCase	P	V2	V3
	m		KN	KN	KN
1	0.00000	DEAD	-18.099	0.000	0.000
1	1.50000	DEAD	-18.049	0.000	0.000
1	3.00000	DEAD	-18.000	0.000	0.000
1	0.00000	live	-18.000	0.000	0.000
1	1.50000	live	-18.000	0.000	0.000
1	3.00000	live	-18.000	0.000	0.000

Table 19: Element Forces - Frames, Part 2 of 2

Table 19: Element Forces - Frames, Part 2 of 2

Frame	Station	OutputCase	T	M2	M3
	m		KN-m	KN-m	KN-m
1	0.00000	DEAD	0.0000	0.0000	0.0000
1	1.50000	DEAD	0.0000	0.0000	0.0000
1	3.00000	DEAD	0.0000	0.0000	0.0000
1	0.00000	live	0.0000	0.0000	0.0000
1	1.50000	live	0.0000	0.0000	0.0000
1	3.00000	live	0.0000	0.0000	0.0000

10. Material take-off

This section provides a material take-off.

Table 20: Material List 2 - By Section Property

Table 20: Material List 2 - By Section Property

Section	ObjectType	NumPieces	TotalLength	TotalWeight
			m	KN
CHCF48.3X3	Frame	1	3.00000	0.099

11. Design preferences

This section provides the design preferences for each type of design, which typically include material reduction factors, framing type, stress ratio limit, deflection limits, and other code specific items.

11.1. Steel design

Table 21: Preferences - Steel Design - AISC360-05-IBC2006, Part 1 of 3

Table 21: Preferences - Steel Design - AISC360-05-IBC2006, Part 1 of 3

FrameType	PatLLF	SRatioLimit	SDC	ImpFactor	SystemRho	SystemSds	SystemR	SystemCd
SMF	0.750000	0.950000	D	1.000000	1.000000	0.500000	8.000000	5.500000

Table 21: Preferences - Steel Design - AISC360-05-IBC2006, Part 2 of 3

Table 21: Preferences - Steel Design - AISC360-05-IBC2006, Part 2 of 3

Omega0	NLCoeff	PhiB	PhiC	PhiTY	PhiTF	PhiV	PhiVRolledl	PhiVT
3.000000	0.002000	0.900000	0.900000	0.900000	0.750000	0.900000	1.000000	0.900000

Table 21: Preferences - Steel Design - AISC360-05-IBC2006, Part 3 of 3

Table 21: Preferences - Steel Design - AISC360-05-IBC2006, Part 3 of 3

PlugWeld	HSSWelding	HSSReduceT	DLRat	SDLAndLLRat	LLRat	TotalRat	NetRat
Yes	ERW	No	120.000000	120.000000	360.000000	240.000000	240.000000

11.2. Concrete design

Table 22: Preferences - Concrete Design - ACI 318-05/IBC2003, Part 1 of 2

Table 22: Preferences - Concrete Design - ACI 318-05/IBC2003, Part 1 of 2

MinEccen	PatLLF	UFLimit	SeisCat
Yes	0.750000	0.950000	D

Table 22: Preferences - Concrete Design - ACI 318-05/IBC2003, Part 2 of 2

Table 22: Preferences - Concrete Design - ACI 318-05/IBC2003, Part 2 of 2

PhiT	PhiCTied	PhiCSpiral	PhiV	PhiVSeismic	PhiVJoint
0.900000	0.650000	0.700000	0.750000	0.600000	0.850000

11.3. Aluminum design

Table 23: Preferences - Aluminum Design - AA-ASD 2000

Table 23: Preferences - Aluminum Design - AA-ASD 2000

FrameType	SRatioLimit	LatFact	UseLatFact
Moment Frame	1.000000	1.333333	No

11.4. Cold formed design

Table 24: Preferences - Cold Formed Design - AISI-ASD96

Table 24: Preferences - Cold Formed Design - AISI-ASD96

FrameType	SRatioLimit	OmegaBS	OmegaBUS	OmegaBLTB	OmegaVS	OmegaVNS	OmegaT	OmegaC
Braced Frame	1.000000	1.670000	1.670000	1.670000	1.670000	1.500000	1.670000	1.800000

12. Design overwrites

This section provides the design overwrites for each type of design, which are assigned to individual members of the structure.

12.1. Steel design

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 1 of 6

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 1 of 6

Frame	DesignSect	FrameType	Fy KN/m2	RLLF	AreaRatio	XLMajor	XLMinor
1	Program Determined	Program Determined	0.00	0.000000	0.000000	0.300000	0.300000

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 2 of 6

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 2 of 6

Frame	XLLTB	K1Major	K1Minor	K2Major	K2Minor	KLTB	CmMajor	CmMinor
1	0.300000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 3 of 6

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 3 of 6

Frame	Cb	B1Major	B1Minor	B2Major	B2Minor	HSSReduceT	HSSWelding	Omega0
1	0.000000	0.000000	0.000000	0.000000	0.000000	Program Determined	Program Determined	0.000000

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 4 of 6

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 4 of 6

Frame	Ry	Pnc	Pnt	Mn3	Mn2	Vn2	Vn3
		KN	KN	KN-m	KN-m	KN	KN
1	0.000000	0.000	0.000	0.0000	0.0000	0.000	0.000

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 5 of 6

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 5 of 6

Frame	DeflType	DLRat	SDLAndLLRat	LLRat	TotalRat	NetRat	DLAbs
							m
1	Program Determined	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 6 of 6

Table 25: Overwrites - Steel Design - AISC360-05-IBC2006, Part 6 of 6

Frame	SDLAndLLAbs	LLAbs	TotalAbs	NetAbs	SpecCamber	DCLimit
	m	m	m	m	m	
1	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

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COMPRESSION TEST REPORT		FSL.Doc/Mecht.Rept-CT-2 (99) Rev. 02
Test Report Ref. No.:		**FSL / CT / 2615-2014**
Client / Customer	Saudi Bilda Contracting Co. Ltd.	**FSL Project No.** SA14-7524
Sample Description	Cuplock Standard, 3.0 Meter	
Sample Received on	07 December 2014	
Material Specification	N/A	
Date of Completion of Test	07 December 2014	
Test Equipment & Calib. Date	UTM Machine & 17 April 2014	
Type of Test & Method	Compression Test	

Compression Test

Sample Designation	Compressive Load KN (lbf)	Remarks
Compression Test – 1	119.60 (26,887)	Shear Occurred at Weld

REFERENCE STANDARD

The above test was conducted in accordance with ASTM E 9

NDT/WSS DIVISION
DAMMAM LAB CR 4110

FUGRO – SUHAIMI
السحيمي - فيغرو
NDT/WSS
INSPECTION DEPT.

SAUDI ARAMCO APPROVED
METALLURGICAL LABORATORY
S.A.P. # 10005628

Tested by : B. Nepomuceno

Checked by : Zaki Nasser

TECHNICAL REVIEW

Technical Manager

APPROVED BY

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COMPRESSION TEST REPORT		FSL.Doc/Mecht.Rept-CT-2 (99) Rev. 02
Test Report Ref. No.:		**FSL / CT / 2586-2014**
Client / Customer	Saudi Bilda Contracting Co. Ltd.	**FSL Project No.** SA14-7524
Sample Description	Cuplock Standard, 1.0 Meter	
Sample Received on	24 November 2014	
Material Specification	N/A	
Date of Completion of Test	30 November 2014	
Test Equipment & Calib. Date	UTM Machine & 17 April 2014	
Type of Test & Method	Compression Test	

Compression Test

Sample Designation	Compressive Load KN (lbf)	Remarks
Compression Test – 1	110.90 (24,931)	Shear Occurred at Weld

REFERENCE STANDARD

The above test was conducted in accordance with ASTM E 9

Tested by : B. Nepomuceno

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السحيمي - فيغرو
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S.A.P. # 10005628

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NDT WSS
INSPECTION DEPT

Checked by : Zaki Nasser

TECHNICAL REVIEW

P **Technical Manager**

NDT DIVISION
DAMMAM CR 4110

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COMPRESSION TEST REPORT		FSL Doc/Mecht Rept-CT-2 (99) Rev 02
Test Report Ref. No.:		**FSL / CT / 2586-2014**
Client / Customer	Saudi Bilda Contracting Co. Ltd.	**FSL Project No.** SA14-7524
Sample Description	Cuplock Standard, 1.0 Meter	
Sample Received on	24 November 2014	
Material Specification	N/A	
Date of Completion of Test	30 November 2014	
Test Equipment & Calib. Date	UTM Machine & 17 April 2014	
Type of Test & Method	Compression Test	

Compression Test

Sample Designation	Compressive Load KN (lbf)	Remarks
Compression Test – 1	110.90 (24,931)	Shear Occurred at Weld

REFERENCE STANDARD

The above test was conducted in accordance with ASTM E 9

Tested by : B. Nepomuceno

FUGRO – SUHAIMI
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TECHNICAL REVIEW

P **Technical Manager**

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COMPRESSION TEST REPORT		FSL Doc/Mecht Rept-CT-2 (99) Rev. 02
Test Report Ref. No.:		**FSL / CT / 2588-2014**
Client / Customer	Saudi Bilda Contracting Co. Ltd.	**FSL Project No.** SA14-7524
Sample Description	Cuplock Ledger, 3.2 mm thk. Tube, 1145 mm. Length	
Sample Received on	24 November 2014	
Material Specification	N/A	
Date of Completion of Test	30 November 2014	
Test Equipment & Calib. Date	UTM Machine & 17 April 2014	
Type of Test & Method	Compression Test	

Compression Test

Sample Designation	Compressive Load KN (lbf)	Remarks
Compression Test – 1	150.80 (33,901)	Tube Deflected

REFERENCE STANDARD

The above test was conducted in accordance with ASTM E 9

Tested by : B. Nepomuceno

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COMPRESSION TEST REPORT		FSL Doc/Mecht Rept-CT-2 (99) Rev. 02
Test Report Ref. No.:		**FSL / CT / 2587-2014**
Client / Customer	Saudi Bilda Contracting Co. Ltd.	**FSL Project No.** SA14-7524
Sample Description	Cuplock Ledger, 3.0 mm thk. Tube, 1145 mm. Length	
Sample Received on	24 November 2014	
Material Specification	N/A	
Date of Completion of Test	30 November 2014	
Test Equipment & Calib. Date	UTM Machine & 17 April 2014	
Type of Test & Method	Compression Test	

Compression Test

Sample Designation	Compressive Load KN (lbf)	Remarks
Compression Test – 1	135.30 (30,417)	Tube Deflected

REFERENCE STANDARD

The above test was conducted in accordance with ASTM E 9

Tested by : B. Nepomuceno

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COMPRESSION TEST REPORT		FSL Doc/Mecht Rept-CT-2 (99) Rev. 02
Test Report Ref. No.:		**FSL / CT / 2585-2014**
Client / Customer	Saudi Bilda Contracting Co. Ltd.	**FSL Project No.** SA14-7524
Sample Description	Adjustable Universal Jack, 38.1 mm x 5 mm x 600 mm (550 mm Threaded and 110 mm Closed with Drop Forged Nut)	
Sample Received on	24 November 2014	
Material Specification	N/A	
Date of Completion of Test	30 November 2014	
Test Equipment & Calib. Date	UTM Machine & 17 April 2014	
Type of Test & Method	Compression Test (@ 400 mm from base to jack nut)	

Compression Test

Sample Designation	Compressive Load KN (lbf)	Remarks
Compression Test – 1	94.30 (21,199)	Tube Deflected

REFERENCE STANDARD

The above test was conducted in accordance with ASTM E 9

Tested by : B. Nepomuceno

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Technical Manager

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COMPRESSION TEST REPORT		FSL Doc/Mecht Rept-CT-2 (99) Rev. 02
Test Report Ref. No.:		**FSL / CT / 2584-2014**
Client / Customer	Saudi Bilda Contracting Co. Ltd.	**FSL Project No.** SA14-7524
Sample Description	Adjustable Base Jack, 38.1 mm x 5 mm x 600 mm (550 mm Threaded and 110 mm Closed with Drop Forged Nut)	
Sample Received on	24 November 2014	
Material Specification	N/A	
Date of Completion of Test	30 November 2014	
Test Equipment & Calib. Date	UTM Machine & 17 April 2014	
Type of Test & Method	Compression Test (@ 400 mm from base to jack nut)	

Compression Test

Sample Designation	Compressive Load KN (lbf)	Remarks
Compression Test – 1	123.90 (27,854)	Tube Deflected

REFERENCE STANDARD

The above test was conducted in accordance with ASTM E 9

Tested by : B. Nepomuceno

FUGRO – SUHAIMI
SAUDI ARAMCO APPROVED
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Checked by : Zaki Nasser
INSPECTION DEPT.

TECHNICAL REVIEW

Technical Manager

FUGRO – SUHAIMI
DAMMAM

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Note: The above test Certificate/Reports shall not be reproduced except in full without the written approval of FSL's Laboratory.

المملكة العربية السعودية
وزارة التجارة و الصناعة

الرقم: ١٠١٠٢٣٤٢٠٥
التاريخ: ١٤٣٧/١٠/٠٧

شهادة تسجيل شركة

الإسم التجاري للشركة : شركة بلدا السعودية

نوعها : ذات مسئولية محدودة **جنسيتها :** سعودية

مدة الشركة : ٣٥ سنة **تبدأ من :** ١٤٣١/١٠/١٦ **وتنتهي في :** ١٤٥٦/١٠/١٦

مركزها الرئيسي للرياض- حي السلي - شارع هارون الرشيد

ص.ب : ٣٩٩٩٩ **الرمز البريدي :** ١١٤٦٧ **هاتف** ٢٧٠٣٣٣٢ **تلكس :** **فاكس** ٢٧٠٠٣٠٧

النشاط : تاجير المعدات الثقيلة والمقاولات العامة للمباني وإقامة المباني الحديدية والمظلات والسواتر والمستودعات والورش لاعمال الحديدية واعمال الحفر والمياه والصرف الصحي والاعمال الكهربائية والالكترونية والميكانيكية وتشجير وتشغيل وصيانة الحدائق وصيانة المرافق الحكومية والاهلية********

رأس المال : ١٠٠٠٠٠٠٠٠ ريال سعودي

المديرون :

١ - فهد محمد عبدالله العريض
٢ - سلطان عبدالعزيز محمد الفلاح
٣ -
٤ -
٥ -
٦ -
٧ -
٨ -
٩ -
١٠ -
١١ -
١٢ -

سلطات المدير / المديرون حسب ما نص عليه عقد الشركة

يشهد مكتب السجل التجاري بمدينة الرياض بأنه تم تسجيل الشركة آنفة الذكر بسجل مدينة الرياض

وتنتهي صلاحية الشهادة في ١٤٣٦/١٠/١ بموجب الإيصال رقم: ٠٠٢٨٩٠١٦ وتاريخ: ١٤٣١/١٠/١٣

مدير السجل التجاري: الإسم: وليد عبدالله الوهيبي

التوقيع:

الختم

بسم الله الرحمن الرحيم

المملكة العربية السعودية
وزارة المالية
مصلحة الزكاة والدخل
(١٨٥)

فرع الرياض

الرقم المميز: ٣٠٠٤٧٦٥٩١٣

رقم الشهادة:١٣٠٤٥٤

التاريـــخ:٢٧-٠٦-١٤٣٥ هـ

شـــهادة

تشهد مصلحة الزكاة والدخل بأن المكلف /شركة بلدا السعوديه
سجل مدني رقم (بدون) وسجل تجاري/رخصة رقم / (١٠١٠٢٢٤٢٠٥)
قدم إقراره عن الفترة المنتهيه في ٣١-١٢-٢٠١٣م
وقد منح هذه الشهاده لتمكينه من إنهاء جميع معاملاته بما في ذلك صرف مستحقاته النهائية عن العقود.
يسري مفعول هذه الشهادة حتى تاريخ ١١-٧-١٤٣٦ هـ الموافق٣٠-٠٤-٢٠١٥ م .
(الحادي عشر من شهر رجب سنة الف و اربعمائة وستة وثلاثون هجري)

الختم الرسمي

وزارة المالية
فرع الرياض
١٣٧٠ هـ
مصلحة الزكاة والدخل

الوظيفة : مدير عام فرع المصلحة بالرياض

الإسم : صالح بن إبراهيم الصريخ

التوقيع :

شهادة الاشتراك ٢٠١٥ م

Certificate of MemberShip 2015

القطاع التنفيذي
الإدارة العامة لخدمات الإشتراكات
إدارة شئون العضوية

الغرفة التجارية الصناعية بالرياض

Unified Membership No. : 101000 **171856**

رقم العضوية الموحد : ١٠١٠٠٠١٧١٨٥٦

Date of Issue : **01/01/2015**

تاريخ الأصدار: ٢٠١٥/٠١/٠١

Classification : **Second**

الدرجـــــة: الثانية

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BALDA AL SAUDI .

شركة بلدا السعودية

Commercial Register No 1010224205

المقيدة بالسجل التجاري / الترخيص رقم ١٠١٠٢٢٤٢٠٥

Registered for this year.

مشتركة لديها لهذا العام .

The Certificate expires on 31/12/2015

وينتهي سريان هذه الشهادة في ٢٠١٥/١٢/٣١م

ص. ب: 29999 الرمز: 11467 هاتف: 2703222 فاكس: 2700307

مدير عام الاشتراكات

ختم الغرفـــة

الغرفة التجارية الصناعية ص.ب ٥٩٦ الرياض ١١٤٢١ الرياض - المملكة العربية السعودية

اي كشط او تعديل في هذه الشهادة يلغيها