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National
Skill Development
Corporation



TEST PROJECT WSI 2018

JOINERY (TRADE 25)

EXPERT - Mr. NARENDER SINGH

SUBMITTED BY :-

FURNITURE & FITTINGS SKILL COUNCIL

ACADEMIC PARTNER :-

BHARTIYA SKILL DEVELOPMENT UNIVERSITY JAIPUR

SKILL DESCRIPTION

A joiner generally works on commercial and residential projects. The joiner is usually based in a workshop because the formation of various joints requires specialist machinery, but sometimes undertakes installations in the homes of customers and on building sites. Joiner will produce and interpret drawings, set out and measure, cut, form joints, assemble, install and finish to a high standard. The joiner usually produces items such as interior and exterior doors, windows, stairs, tables and bookshelves. Joinery is closely associated with cabinet making and carpentry plus other parts of the construction industry and with the many products that support it, normally for commercial purposes.

There is a direct relationship between the nature and quality of the product required and the payment made by the customer. Therefore, the joiner has a continuing responsibility to work professionally in order to meet the requirements of the customer and thus maintain and grow the business. Work organization and self-management, communication and interpersonal skills, problem solving, innovation and creativity, working precisely and accurately are the universal attributes of the outstanding joiner. From working safely through to exceptional planning and organizing, accuracy, concentration and attention to detail to achieve an excellent finish, every step in the process matters. The diversity of skills associated with joinery is therefore likely to expand.

TEST PROJECT DRAWING (3D VIEW)



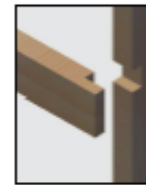
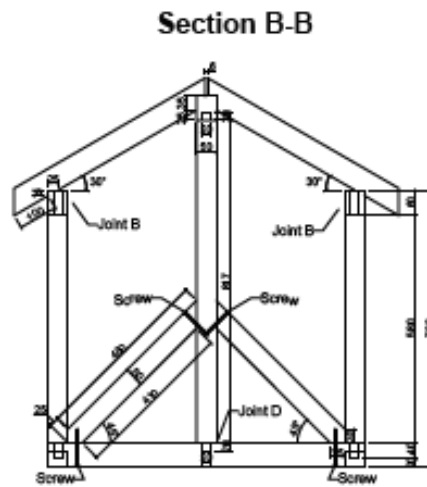
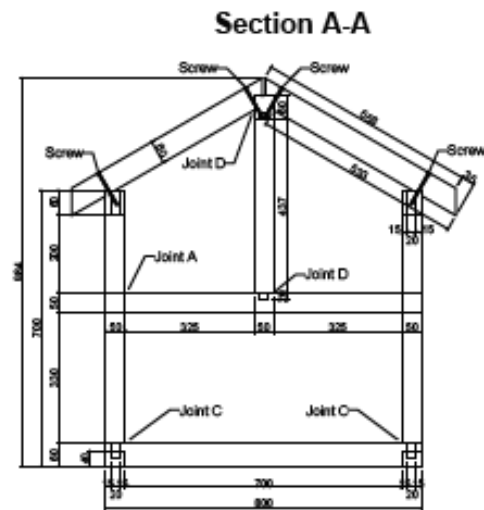
3 D VIEW



EXPLODED VIEW

Project - Joinery (India Skills) Competition in Aerocity Grounds, New Delhi, India 2018. Copyright © 2018 India Skills. All Rights Reserved		 india skills		 BSDU Bhanu Sankar Das University
Skill 25 - Joinery		3D Detail View		
Scale:	Date: 05.04.2018	Original version designed by: School of Carpenter Skills - SCS		Competition version designed by: SCS
Model House Structure		Drawing No: ISC2018_TP25_AS_SCS_PT_01		CARPENTER
		Page: 01 of 02	Paper: A3	

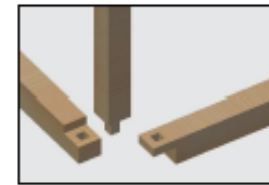
TEST PROJECT DRAWING (2D VIEW)



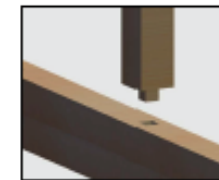
Joint A



Joint B

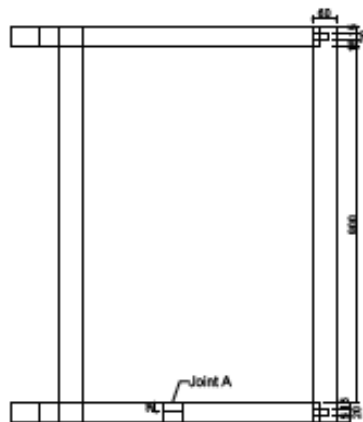


Joint C

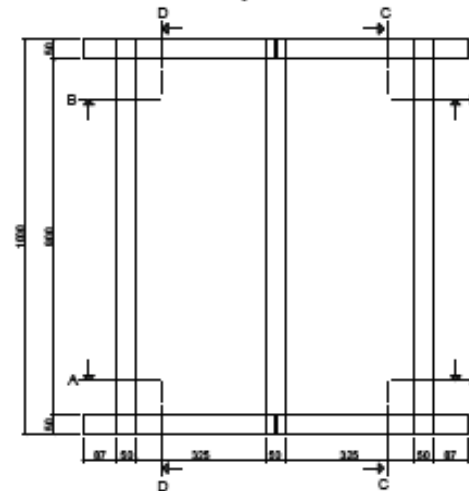


Joint D

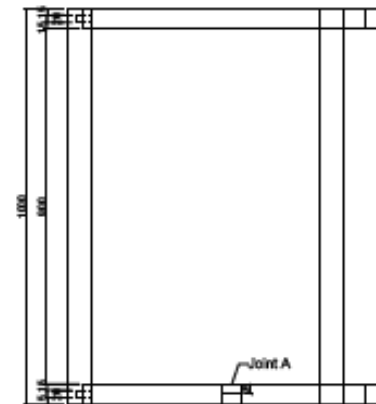
Section D-D



Top View



Section C-C



Project - Joinery (India Skills)
Competition in Aerocity Grounds, New Delhi, India 2018.
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Skill 25 - Joinery
Scale: 1:12
Original version designed by: School of Carpenter Skills - SCS
Model House Structure

Detail Drawing
Date: 05.04.2018
Competition version designed by: SCS
Drawing No: ISC2018_TP25_A3_SCS_PT_02
Page: 02 of 02

Paper: A3

CARPENTER

MARKING SCHEME

Section	Criteria	Marks		
		Judgement	Measurement	Total
1	Conformity To Drawing	5	7	12
2	Internal Joint	10	10	20
3	External Joint	0	24	24
4	Finish & Appearance	9	10	19
5	Measurements	0	19	19
7	Use of Materials	0	3	3
8	Health & Safety	0	3	3
Total		24	76	100

INFRASTRUCTURE LIST

Phrase 1 – Standard machines

S. No.	Machine Name	Model Name	Qty.	Power Rating	Working Area (Sq. Feet)	Remark
1	Sliding Panel Saw	Altendorf WA8	1	5.5 KW	23'x15'	Per Skill
2	Surface Planner	SCM NOVA F 520	1	5 KW	13'x7'	Per Skill
3	Vertical Band saw	Minimax S 400 p	2	460V	8'x10'	Per Skill
4	Belt Sander	Woodtech	1	420V	6'x10'	Per Skill

Phrase 2 – Handy machines

S. No.	Machine Name	Model Name	Qty.	Power Rating	Table Size For Base	Remark
1	Circular Saw	Ts 55 REBQ-Plus-	3	1200W	5'x5'	Per Skill
2	Rail Guide For Circular Saw	FS 800/1400	3	Nil	Nil	Per Skill
3	Mitre Saw	Kapex KS 120 E	3	600W	9'x6'	Per Skill
4	Router	OF 1010 EBQ-Plus	1	1010W	Competitor Table	Per Competitor
5	Jig Saw	PS 420 EBQ-Plus	1	550W	Competitor Table	Per Competitor

6	Edge Router	OFK 500Q-plus R3	1	450W	Competitor Table	Per Competitor
7	Cordless Drills	Txs Li 2	1	10,8V	Competitor Table	Per Competitor
8	Accessories of Cordless Drill Set	SYS 1 CE-SORT	1		Competitor Table	Per Competitor
9	Dust Extractor	CTL Mini,CTL 26 E	1	1200W	Competitor Table	Per Competitor
10	Sander	RO 150 FEQ-Plus	1	720W	Competitor Table	Per Competitor

Phrase 3 – Hand Tools

S. No.	Machine Name	Qty.	Remark
1	Steel Ruler	1	Per Competitor
2	Measuring Tape	1	Per Competitor
3	Marking Gauge	1	Per Competitor
4	Try Square	1	Per Competitor
5	Bevel Square	1	Per Competitor
6	Jack Planer	1	Per Competitor
7	Hand Saw	1	Per Competitor
8	Firmer Chisel Set	1	Per Competitor

9	Mortise Chisel Set	1	Per Competitor
10	Mallet	1	Per Competitor
11	Nylon Hammer	1	Per Competitor
12	Flat Files Set	1	Per Competitor
13	Sanding cork	1	Per Competitor
14	Pincer	1	Per Competitor
15	Clamp Set (1200, 600,400,250 MM)	2	Per Competitor
16	C- Clamp	2	Per Competitor

Phrase 4 – Safety Equipment

S. No.	Machine Name	Quantity	Remark
1	Ear Plug	2	Per Competitor
2	Ear Muffle	1	Per Competitor
3	Nose Mask	3	Per Competitor
4	Hand Gloves	1	Per Competitor
5	Goggles	1	Per Competitor
6	Safety Shoes	1	Per Competitor

Phrase 5 – Consumables

S. No.	Machine Name	Quantity	Remark
1	Screws 90x5mm Phillips Head Box	1	Per Skill
2	Adhesive 200 gm	1	Per Competitor
3	Masking Tape	1	Per Competitor
4	Sanding Paper (Grade 80,120,180,220)	5	Per Competitor
5	Cottons	5	Per Competitor

Phrase 6 – Others

S. No.	Machine Name	Quantity	Remark
1	Working Table With Bench Vice	1	Per Competitor
2	Power Plug on Working Table (1200 W)	1	Per Competitor
3	First-Aid Box	2	Per Skill
4	Dust Bin	1	Per Competitor
5	Drawing Board (A3)	1	Per Competitor
6	Jury Table	2	Per Skill
7	Working Area (5X3 Meter)	1	Per Competitor

Phrase 7 – Stationery

S. No.	Machine Name	Quantity	Remark
1	Pencil (0.5, 2.0 MM)	1	Per Competitor
2	Geometry Set	1	Per Competitor
3	Paper Set (A4)	4	Per Competitor
4	Stationary Set For Jury	1	Per Member

INSTRUCTION TO THE COMPETITOR

- Any type of electronic equipment is not allowed in working area.
- Competitors are not allowed to use assembled jigs, fixtures or templates.
- The maximum open height of the toolbox MUST not exceed 1.5 m.
- The maximum permitted height of any object is not allowed to be greater than 1.5m but Supplied bench light, ducting pipe and frame and small flagpole can go over the 1500mm height.
- If water, oil, wax etc. is used on a joint, the marking for a perfect joint will be 50% max.
- No excessive dust from any power tool (mitre saw, router, sander, etc.) may enter the area of another Competitor or the general shop space.
- Upon arrival and unpacking of toolboxes, Competitors will show all tools and power tools to Chief Expert for validation prior to the commencement of the Competition.

HEALTH, SAFETY AND ENVIRONMENT ASPECTS

- The Workshop Manager will be responsible for tooling and tooling changes on machinery. The Workshop Manager is not allowed to adjust any machinery for a Competitor but is required to provide supervision
- Each bench must have a minimum of one vice with wooden chops mounted on the long side.
- All circular saws must have a riving knife and top guard.
- The safety protection devices, as guards, fences and stops can't be removed from operating machines.
- Compressed air should not to be used for dust removal.
- The work bench must be height adjustable.
- All Competitors must use safety glasses when using any hand, power or machine tools or equipment likely to create chips or fragments that may injure the eyes.
- A first-aid kit must be available throughout the Competition.
- Experts will use the appropriate personal safety equipment when inspecting, checking or working in the machinery work area and Competitors' work areas.
- All Competitors must use respiratory protection when using any hand or power equipment which creates dust.
- All machines will use the necessary safety guards, tooling, suction devices, auxiliary equipment and extraction system that meet the machine manufacturer's specifications.
- The lighting level at bench height is to be a minimum of 300 lux.
- Competitor work space must be visible to Expert and Jury members all of the time during competition.