



2010 NATIONAL COMPETITION

Joinery

**Pre-Competition Information
for Competitors**

Project Designer:

Peter Leith – Leith Joinery

Name and contact details for Skill Expert

Peter Leith

Leith Joinery, PO Box 778, Dunedin

03) 477 0115 or 021) 500 456

INTRODUCTION

Congratulations on qualifying for a WorldSkills New Zealand national competition. The pathway to success includes a careful study of these instructions. **Please read these instructions fully and retain them for the competition days.**

A WorldSkills New Zealand competition will give you a ranking against your peers according to the skills you demonstrate on the day. You are judged according to your ability to achieve set goals and are awarded marks according to how well you achieve those goals. Unlike standard competency assessments if you perform better than the industry standard demands then you will be rewarded for that effort.

This project has been designed to test the skills in Detailed Joinery in the area of Solid Timber Joinery.

The following will guide you as to the type of skills to be tested, materials to be used and tools and equipment to be brought by the competitors and that to be supplied by the organisers. You will be issued with further instructions on the day of the competition.

Skills List

- Drawing interpretation and understanding of marking scale
- Time and production scheduling
- Set out – only as required (neatness, content and accuracy)
- Economical use of materials
- Ability to use machinery and power tools (ie drills, drop saw, band saw, router, dowel borer, spindle moulder, etc)
- Ability to use hand tools
- Constructing different types of joints within given tolerances
- Machining materials to sectional sizes and moulding details
- Ability to use solid timber
- The Ability to use pre-finished board and laminate
- The existence and use of safety equipment
- Ability to present a finished project within the time constraints
- Presentation and finish of completed project

Competition Schedule

The maximum working time for this competition is 20 working hours. As a competitor you should keep track of time yourself. The timetable for the day of competition is shown below.

Day of Arrival (Wednesday 22 September)

3.00pm – 5.00pm	Arrival, draw for work stations and instructions
5.00pm	Opening Ceremony
6:30pm	Dinner at CPIT

Day 1 (Thursday 23 September)

9.00am –	Familiarisation
9:30 am	Commence work on competition project
Competitors take breaks at different times.	Morning Break
	Continue work on competition project
Morning and afternoon breaks – 15 mins	Lunch break
	Continue work on competition project
Lunch ½ hr	Afternoon Break
	Continue work on competition project
5:00 pm	Stop work on competition project
5:00 pm	Competition Debrief

Day 2 (Friday 24 September)

8.00am	Familiarisation
8:30 am	Commence work on competition project
Competitors take breaks at different times.	Morning Break
	Continue work on competition project
Morning and afternoon breaks – 15 mins	Lunch break
	Continue work on competition project
Lunch ½ hr	Afternoon Break
	Continue work on competition project
4:00 pm	Stop work on competition project
4:00 pm	Competition Debrief

Day 3 (Saturday 25 September)

8.00am -	Familiarisation
8:30 am	Commence work on competition project
Competitors take breaks at different times.	Morning Break
	Continue work on competition project
Morning break– 15 mins	Lunch break
	Continue work on competition project
Lunch ½ hr	
3.00pm	Stop work on competition project
3.05pm	Competition Debrief

Day 4 (Sunday 21 September)

	Clean Up at CPIT if necessary
11am	Awards Ceremony

Marking Scale Summary

All competitors who compete in this skill category will be judged according to the same criteria. A summary of the different project sections and the number of marks allocated to each section is shown below.

Section	Task	Maximum Possible Marks
	Set Out	15
	Joints Internal	20
	Joints External	25
	Major Dimensions	15
	Minor Dimensions	5
	Machining Detail	10
	Presentation/Finish	10
	Subtotal	100
	Deductions – materials Minus 5 marks per extra piece	-10
	Total Marks Possible	100

Description of Marking Systems

The following marking systems will be used by the Judges in their assessment of your project.

Objective Marking

Judges will carry out **objective marking** in areas of the project where tolerances can be applied or where it can clearly be seen that a task has or has not been completed.

The marks to be awarded are scaled as shown:

- Within 2% of tolerance maximum marks
- Within 2% to 5% of tolerance 50% of marks
- Within 5% to 7% of tolerance 20% marks
- Greater than 7% or not attempted no marks

Subjective Marking

Judges will carry out **subjective marking** in areas of the project where a visual assessment needs to be made.

Description of Judges marking scale where subjective marking is to be used.

Judges Marking Scale	0-10
Perfect	10
Very Good	9
Good	8
Acceptable	7
Sufficient	6
Medium	5
Weak	4
Poor	3
Bad	2
Very Bad	1
Not attempted	0

EQUIPMENT TO BE SUPPLIED BY THE COMPETITOR

Competitors are responsible for their own tools. It should be noted that all power tools and machinery must comply with OSH regulations and have adequate safety guards and be in what is deemed to be safe operating condition. At the discretion of the officials any suspect piece of equipment may be prevented from being used. Competitors should supply the information listed below.

- Handsaws: panel, tenon, dovetail, Japanese Pull
- Square: Butt, Combination
- Bevels: Adjustable
- Trammel Points or Dividers
- Steel Rule; 1000mm, 300mm
- Tape measure
- Marking gauges
- Scribing knife
- Pencils, eraser and drafting equipment
- Hammer
- Drill, (battery or 240V)
- Drill Bits: Twist and Shade bits
- Chisels: 6mm, 12mm, 18mm, 25mm
- Planes: smoother and lower angle block
- Nail punch
- Sanding block
- Sash cramps, 500mm min – 2 of
- Quick action sliding clamps – 2 of
- Sharpening equipment
- Safety equipment: Eye and hearing protection, footwear and clothing, etc

Competitors may also bring any hand tool, power tool or piece of equipment classified as trade oriented that may assist you. This equipment will, however, need to be available for other competitors to use if they wish to.

It should be noted that all power tools and machinery must have adequate safety guards and be in what is deemed to be a safe operating condition. At the discretion of the officials, any suspect piece of equipment may be prevented from being used.

EQUIPMENT AND MATERIALS TO BE SUPPLIED BY THE ORGANISERS – PER COMPETITOR -

Machined to finished size and profiled

Window Sill	170 x 45	1 @ 1000
Window Frame Stiles	130 x 42	1 @ 700, 1 @ 500
Window Frame Head	130 x 42	1 @ 1000
Window Mullions	130 x 42	1 @ 650
Sash Head	125 x 42	1 @ 500
Sash Head	54 x 42	1 @ 500
Sash Stiles	54 x 42	1 @ 600, 2 @ 500, 1 @ 400
Sash bottom rails	85 x 42	2 @ 450
Sash glazing bars	42 x 24	1 @ 500
75mm Xinc butt hinges, fixed pin		4 of
7g x 25mm wood screws		24 of

The wood supplied will be joinery grade “well seasoned” pinus radiata UT clears

Equipment Supplied

- Wooden Workbench with vice – 1 per competitor
- 240 volt power outlet – 1 per competitor
- Two (2) quick action sliding or “gee” cramps – One (1) per competitor
- Drop extension saw with “fine-cut” blade – One (1) per 4 competitors
- Electric router – One (1) per two (2) competitors
- 150mm Buzzer
- All other portable tools
- Bandsaw (Shallow Throat)
- Chisel Mortiser
- Router Cutters (straight cutter and template bearing)
- Screws - Superscrews – 60 x 10
- Abrasive paper – 80, 120 and 180 grit
- Battery Drill (as spare)
- Adhesive – Rakol or similar