



**Skill No 25 Joinery**

**Swiss Project**

**Proposal made by Roger Huwyler**

<b>40</b>	<b>WS</b>	<b>2009</b>	<b>25</b>	<b>CH</b>	<b>A</b>	<b>1</b>	<b>1</b>
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TRADE

N°: 25

JOINERY

COMPETITOR

N°:.....

NAME : ..... COUNTRY : .....

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TRADE

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JOINERY

COMPETITOR

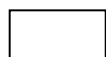
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NAME : ..... COUNTRY : .....

**WORKING INSTRUCTIONS****Stair with staircase railing**

*Execution* : Stair with staircase railing made in hard wood

*Construction* : Staircase railing : mortice and tenon joint  
: Panel : groove  
: Stair step : housed string and through tenon with wedge  
: Staircase string : groove and beard

**Head dimensions**

Secondary dimensions

# WORLDSKILLS

2009

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## WORKING INSTRUCTIONS FOR THE COMPETITORS

Allowed work during the first half an hour:

Reading drawing, making sketches, checking the material.

All joints and details must be made as per the working drawing.

All machines can be used for your work, however it is not allowed to rip joints on the circular saw.

You must work with all supplied safety guards.

All pieces with internal joints of the stair and the staircase railing must be marked by the experts before gluing.

All surfaces must be sanded to a high quality.

Every candidate must make their own time plan. The time will not be stopped. Only in special cases the jury will decide time extensions.

Every candidate must keep track and control their own time. The time will not be stopped, except in the case of an accident or sickness.

Your own measuring equipment, must be available after finishing your work to check the measurements.

The maximal working time is 11 hours.

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TRADE

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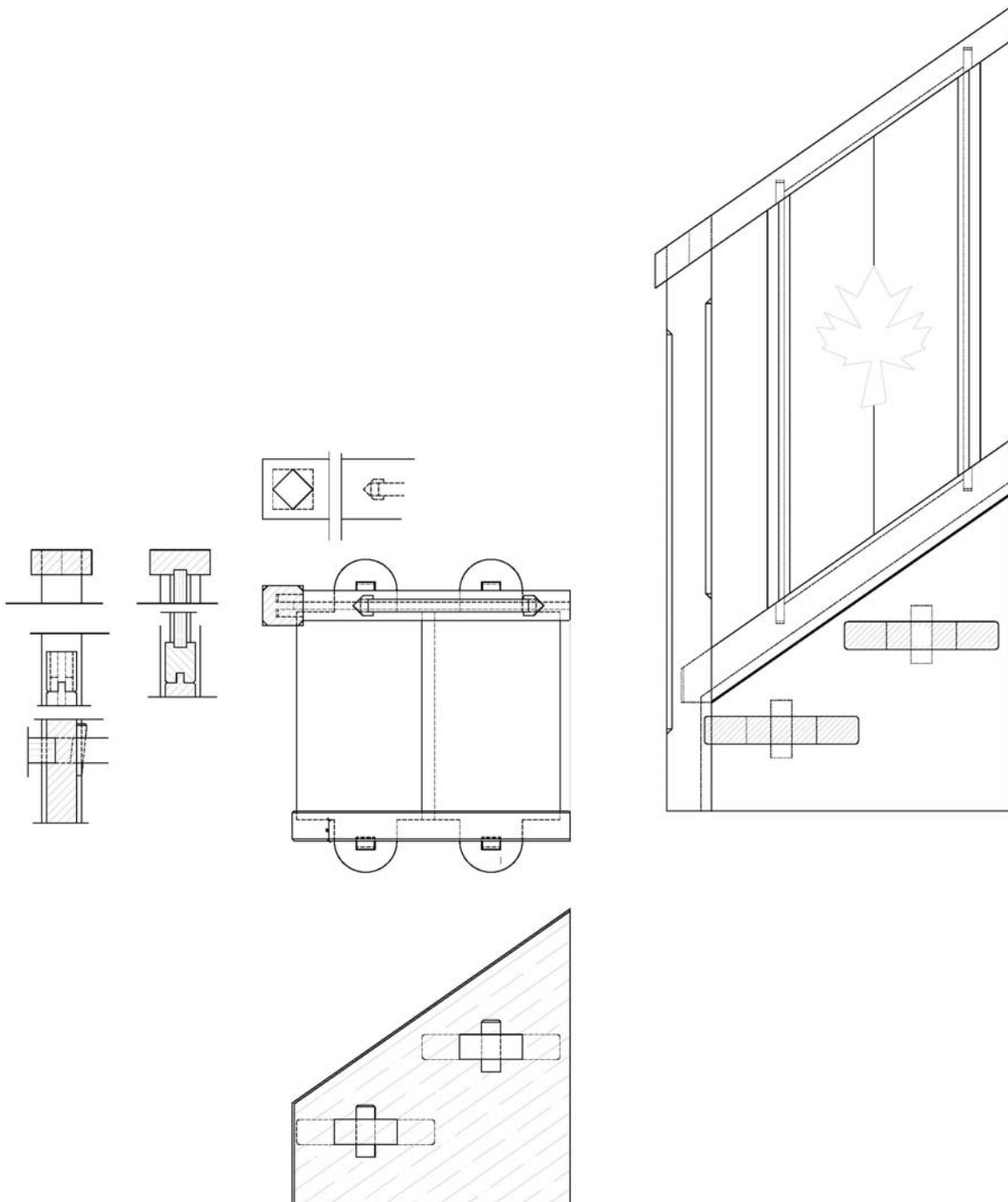
JOINERY

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**DRAW**



**WORLDSKILLS****2009**

TRADE

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COMPETITOR

N°:.....

NAME : ..... COUNTRY : .....

**LIST OF MATERIALS**

<b>Designate</b>	<b>Number</b>	<b>Lenght</b>	<b>Breath</b>	<b>Thickness</b>
<b>Jamb casing</b>				
1	1	880	64	64
2	1	680	96	40
3	2	660	32	32
4	2	720	128	20
5	1	630	64	48
<b>Frame</b>				
6	2	700	400	48
7	2	520	220	40
8	1	500	30	30

**40****WS****2009****25****CH****A****5****1**

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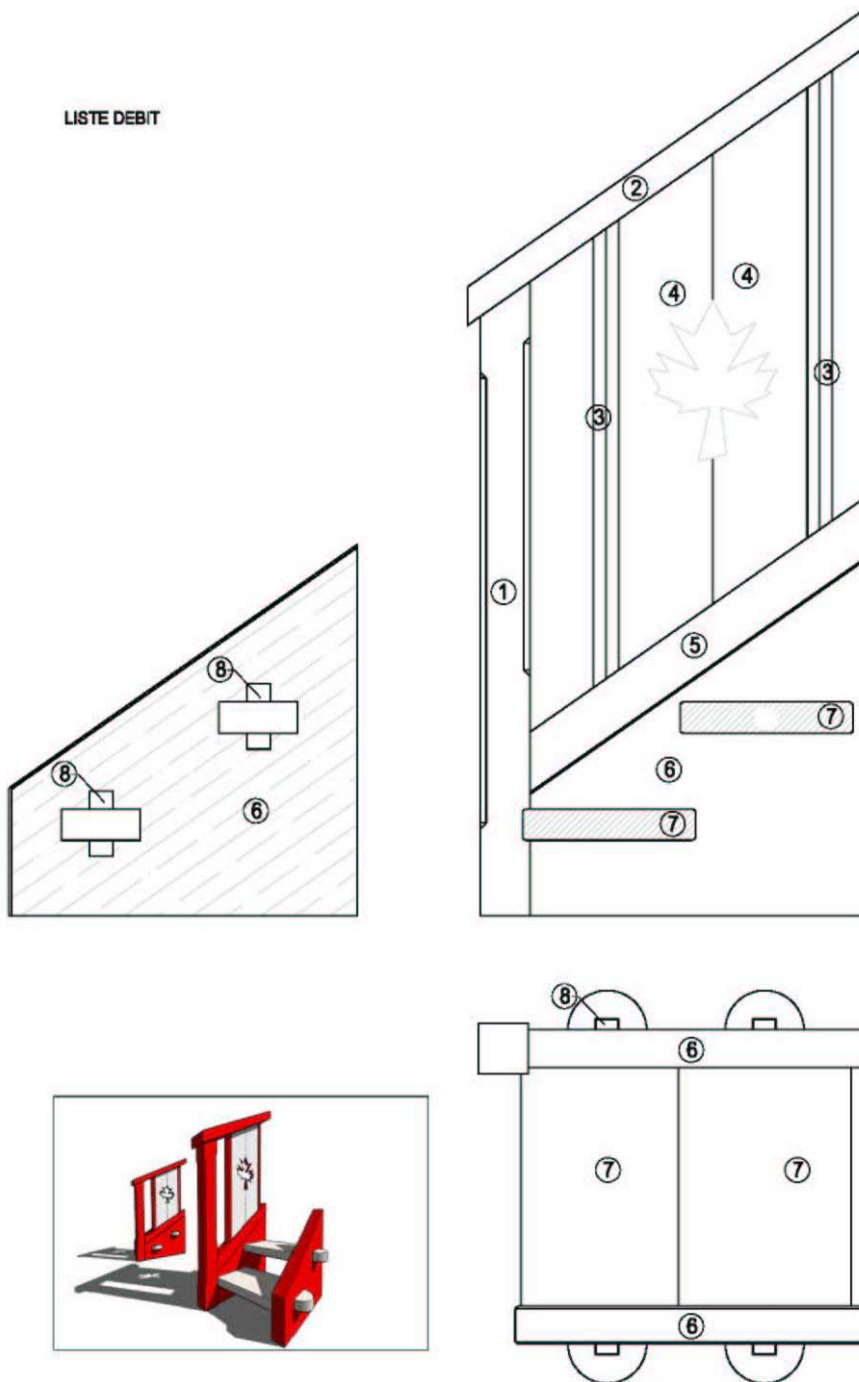
COMPETITOR

N°: .....

NAME : ..... COUNTRY : .....

MATERIAL SCHEME

LISTE DEBIT



# WORLD SKILLS

2009

TRADE N°: 25 JOINERY  
COMPETITOR N°:..... NAME : ..... COUNTRY : .....

## MARKING CRITERIA

	Subjective	Objective	Points
B. Internal joints	S		10
C. External joints	S		12.5
D. Finish and appearance		O	10
E. Conformity		O	2.5
F. Measurement		O	7.5
G. Material ( both modules )		O	2.5

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# WORLD SKILLS

2009

TRADE

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## DETAILED MARKING CRITERIA

	<u>Detail points</u>	<u>Max points</u>
<b>B <u>Internal joints</u></b>		10
B1 Through tenon	2.5	
B2 Double tenon	1.5	
B3 Tenon	0.5	
B4 Tenon	0.5	
B5 Tenon	0.5	
B6 Tenon	0.5	
B7 Groove panel	0.5	
B8 Groove and beard staircase string	0.5	
B9 Housed string and through tenon with wedge	0.75	
B10 Housed string and through tenon with wedge	0.75	
B11 Housed string and through tenon with wedge	0.75	
B12 Housed string and through tenon with wedge	0.75	
<b>C <u>External joints</u></b>		12.5
C1 Through tenon	3.5	
C2 Double tenon	1	
C3 Tenon	0.5	
C4 Tenon	0.5	
C5 Tenon	0.5	
C6 Tenon	0.5	
C7 Groove panel	0.5	
C8 Groove and beard staircase string	0.5	
C9 Housed string and through tenon with wedge	1.25	
C10 Housed string and through tenon with wedge	1.25	
C11 Housed string and through tenon with wedge	1.25	
C12 Housed string and through tenon with wedge	1.25	

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WS

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### DETAILED MARKING CRITERIA

	<u>Detail point</u>	<u>max. point.</u>
<b>D <u>Finish and appearance</u></b>		10
D1 Stop moulding 45° post	1.5	
D2 Carving maple leaf panel	1.5	
D3 Round of step	1	
D4 Wedge step	1	
D5 Face sanding	3	
D6 Sanding of arrisses \ corners	2	
<b>E <u>Conformity</u></b>		2.5
E1 Staircase	0.75	
E2 Stair step	0.75	
E3 Moulding and joint mistake - 1 point	1	
<b>F <u>Measurement</u></b>		7.5
F1 1154 primary dimensions	1	
F2 800 +/- 1 mm 100 %	1	
F3 490 +/- 2 mm 50% over 2 mm 0%	0.75	
F4 400 measured 2x	0.75	
F5 573 measured 2x	0.5	
F6 80 measured 2x	0.5	
F7 240 measured 2x	0.5	
F8 70 measured 2x secondary dimensions	0.5	
F9 96 measured 2x +/- 1 mm 100%	1	
F10 50 measured 2x over 1 mm 0%	0.5	
F11 = X measured 2x	0.5	
<b>G <u>Material</u></b>		2.5
G1 Piece first replaced	- 1	
G2 Piece second replaced	- 0.5	
G3 Piece third replaced	- 0.5	
G4 Piece fourth replaced	- 0.5	

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**MARKING CRITERIA B AND C**

NOTATION: B + C - D3 + D4  
 BEWERTUNG: B + C - D3 + D4  
 DETAILED MARKING: B + C - D3 + D4

INDUSTRIAL PRODUCT TRADE SKILLS WORLD SKILLS COMPETITION 2009	TECHNICAL PARAMETER: WOODWORK
COMPETITOR	ENTRY NUMBER
	FORMAN NAME
	DATE / COUNTRY
	WORKING / DECORATED METAL