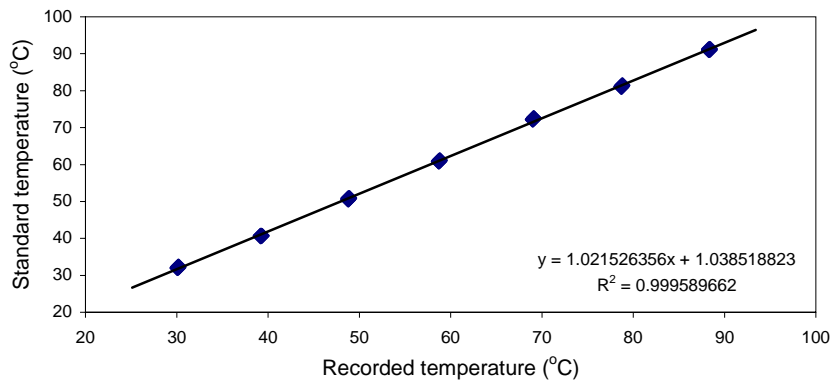


Appendix A

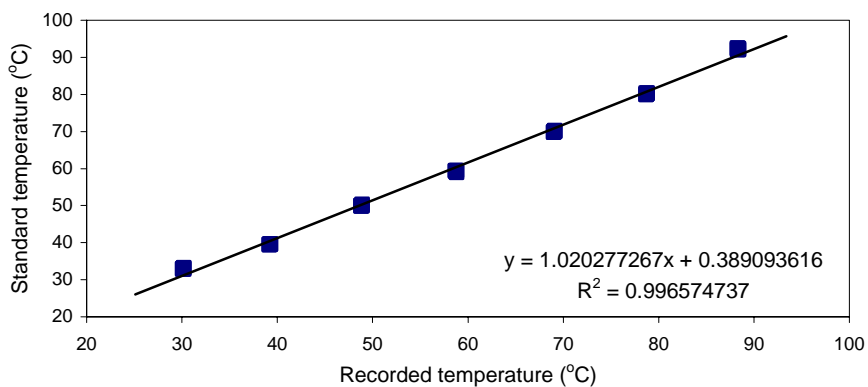
**Temperature calibration of thermocouple used at all positions and
the moisture content of firewood in the experiment**

Figures-Appendix A1 Temperature relationship between all thermocouples and a standard thermometer.

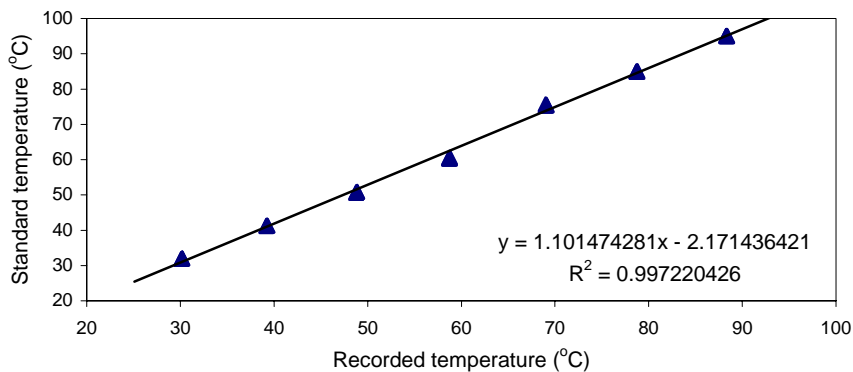
Position 1

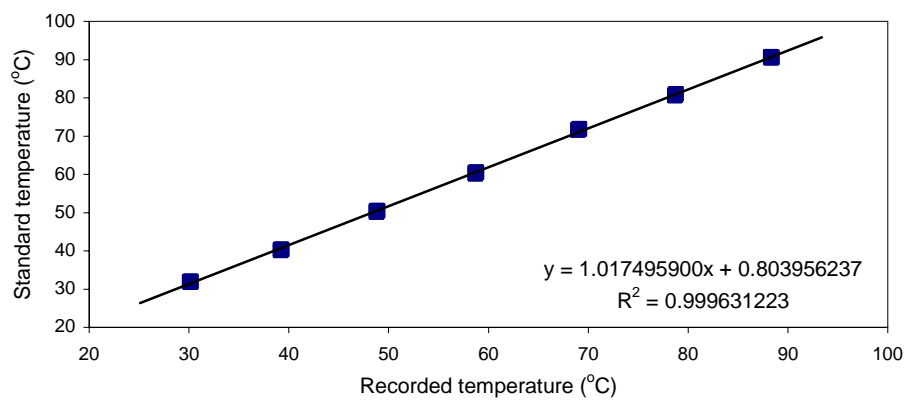
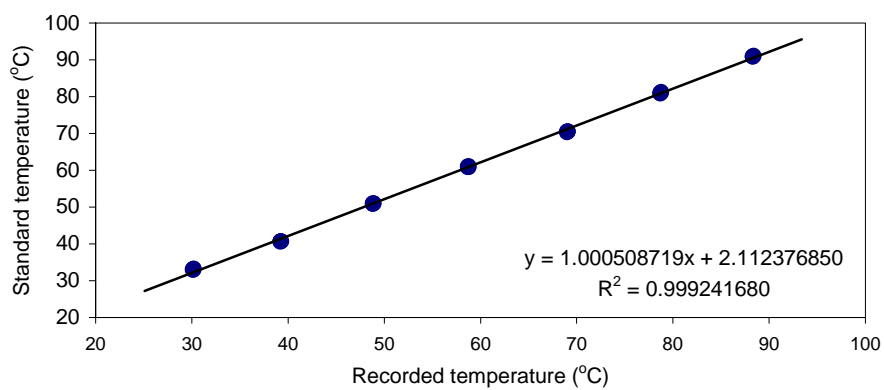
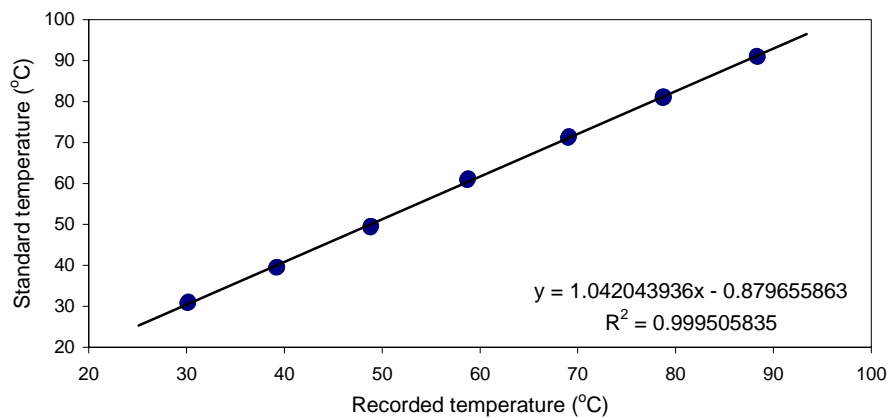


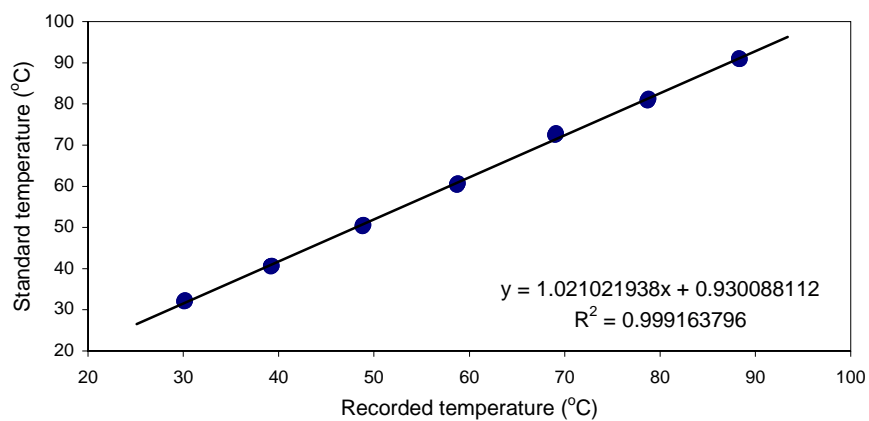
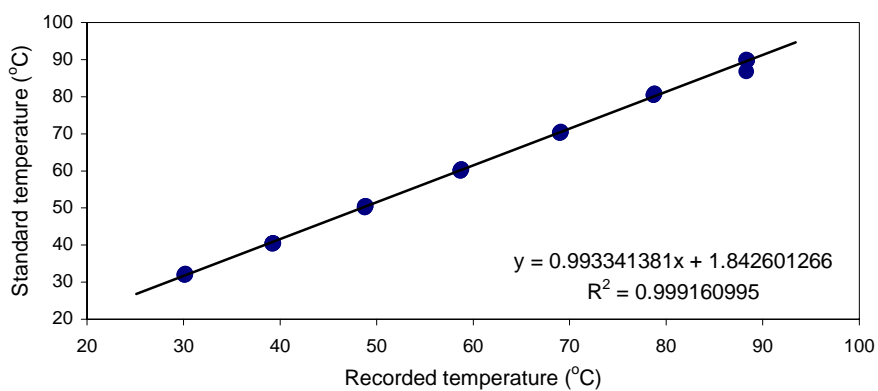
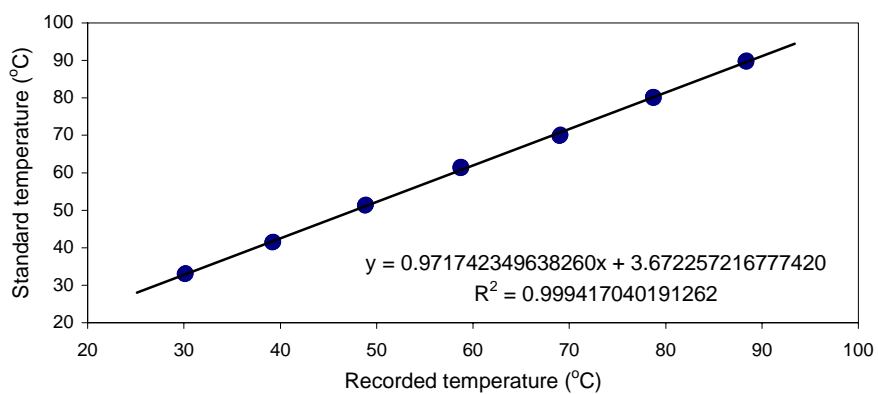
Position 2

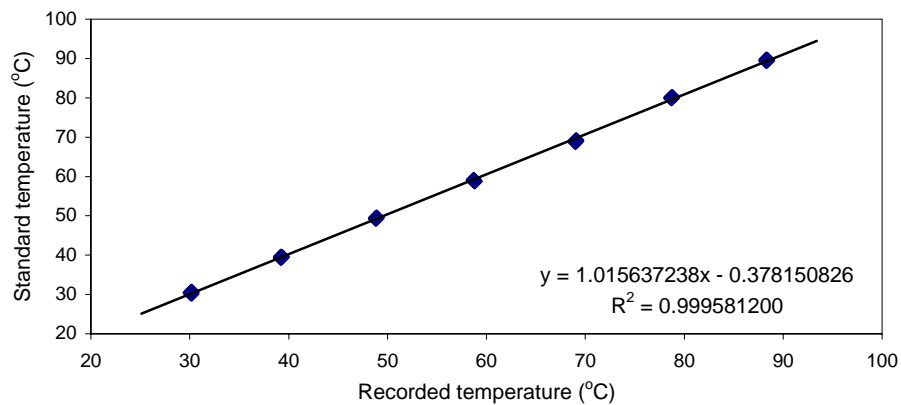
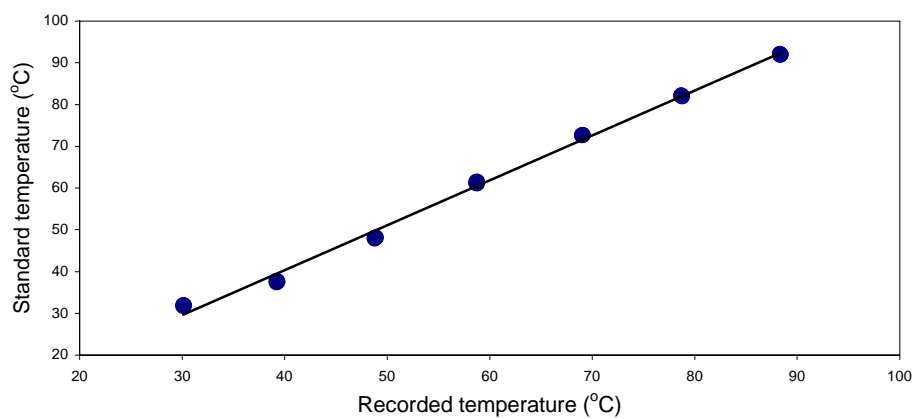
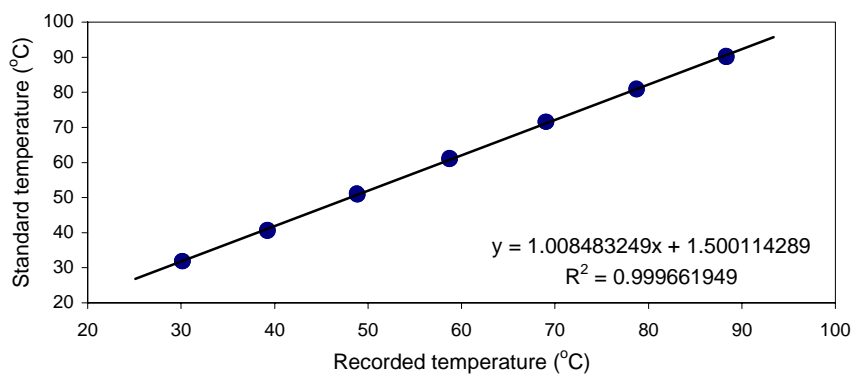


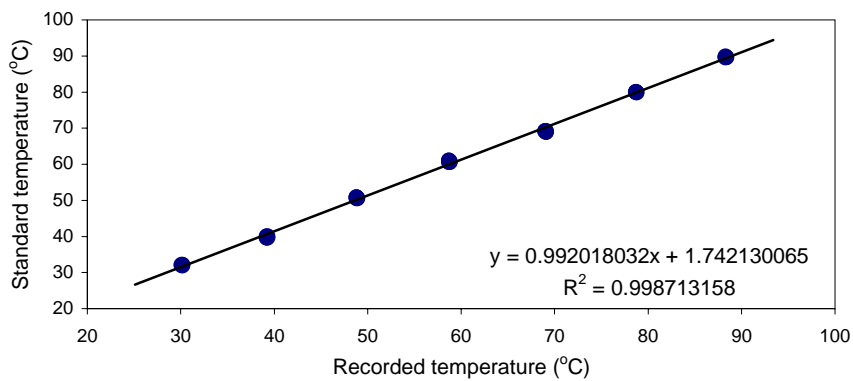
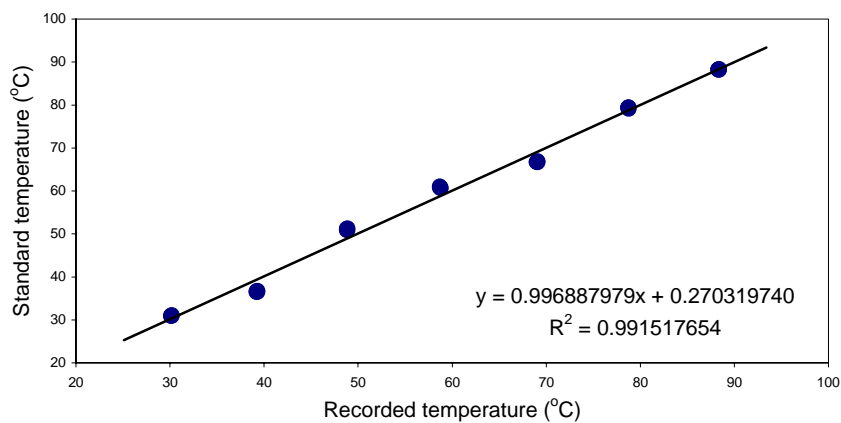
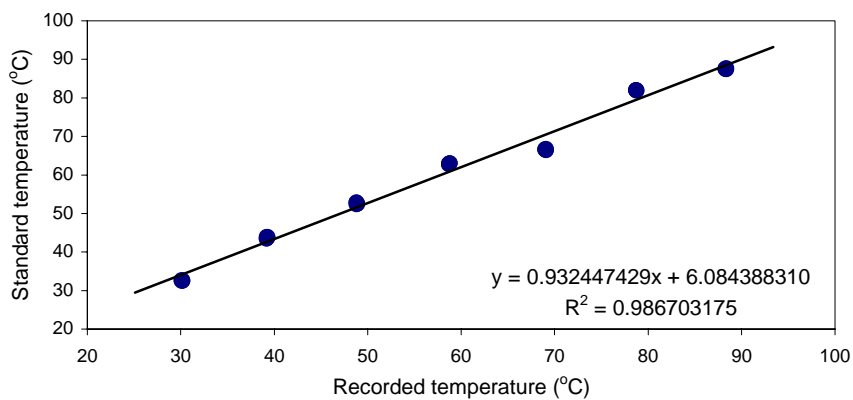
Position 3



Position 4**Position 5****Position 6**

Position 7**Position 8****Position 9**

Position 10**Position 11****Position 12**

Position 13**Position 14****Position 15**

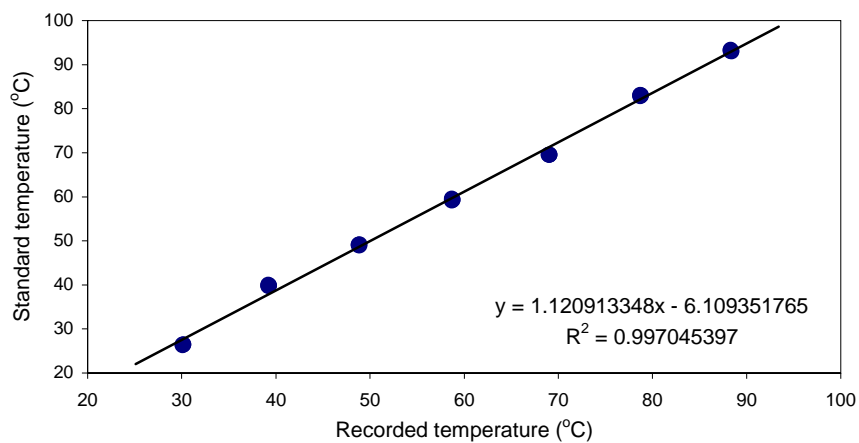
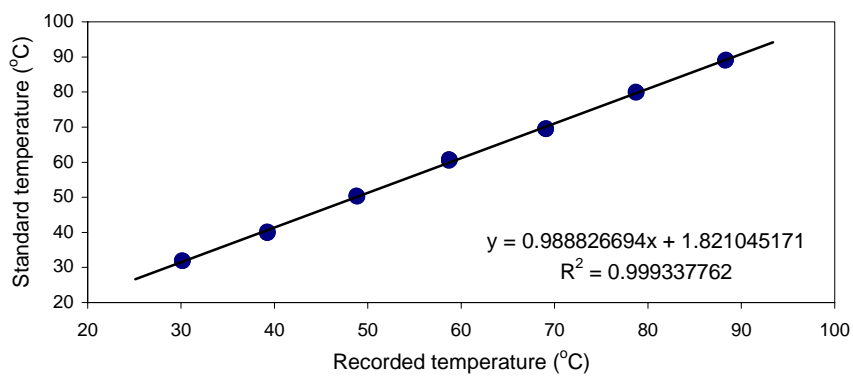
Ambient**Chimney**

Table-Appendix A1 Heating value of firewood on proportion moisture contents.

Moisture content (% per dry basis)	Heating value (kJ/kg)
11.1	16,240
17.6	15,200
25.0	14,140
33.3	13,100
42.8	12,050
53.8	11,000
66.6	9,960
81.8	8,910
100.0	7,870
122.2	6,450
150.0	5,360
185.7	4,270
233.3	3,180
300.0	2,090

Source: Proceeding of European-Asian Conference on Combustion of Solid and Treatment of Products, 1995. pp. E-30

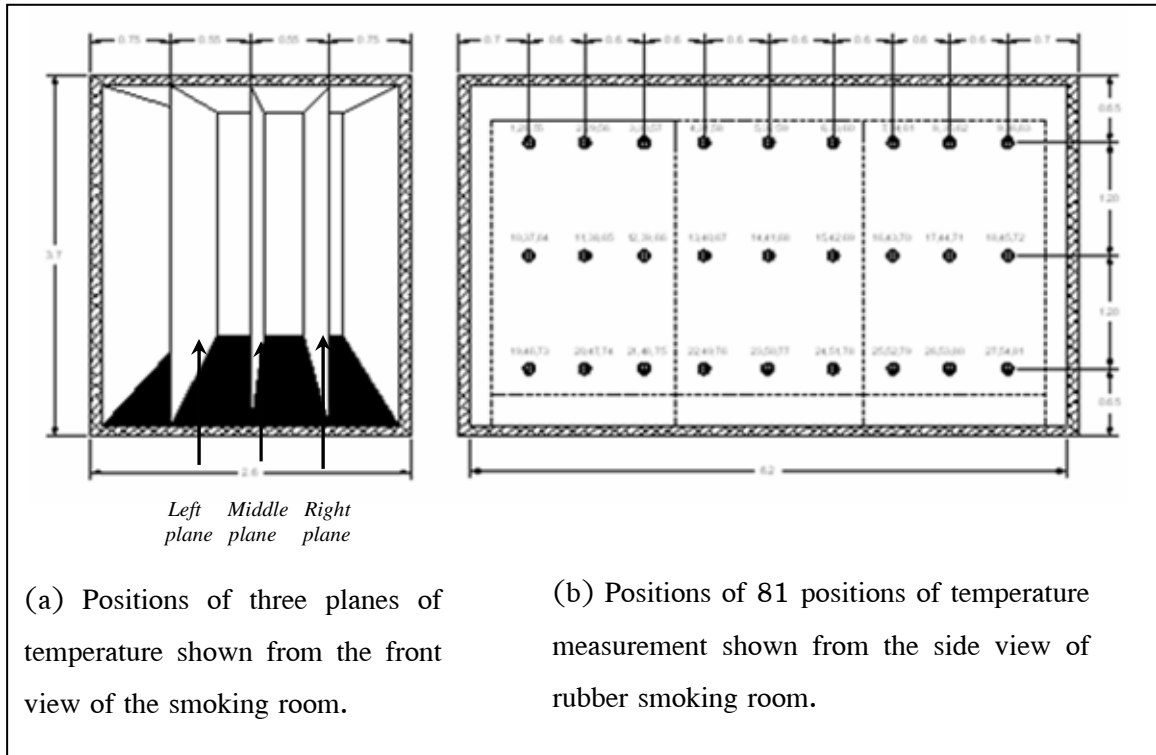
Table-Appendix A2 Moisture contents of firewood of this experiment.

Sampling No.	Mass (g)	Dry mass (g)	Moisture Content (% per dry basis)
1	6.50	4.06	60.10
2	4.91	3.30	48.79
3	20.51	12.07	69.93
4	15.16	9.02	68.07
5	6.41	3.93	63.10
6	5.12	3.25	57.54
7	6.95	4.23	64.30
8	4.05	2.62	54.58
9	5.12	3.47	47.55
10	15.85	9.27	70.98
Average moisture content (% per dry basis)			60.49
Heating value of firewood (kJ/kg)			10,361.00
Total heat supply (W)			28,781.00

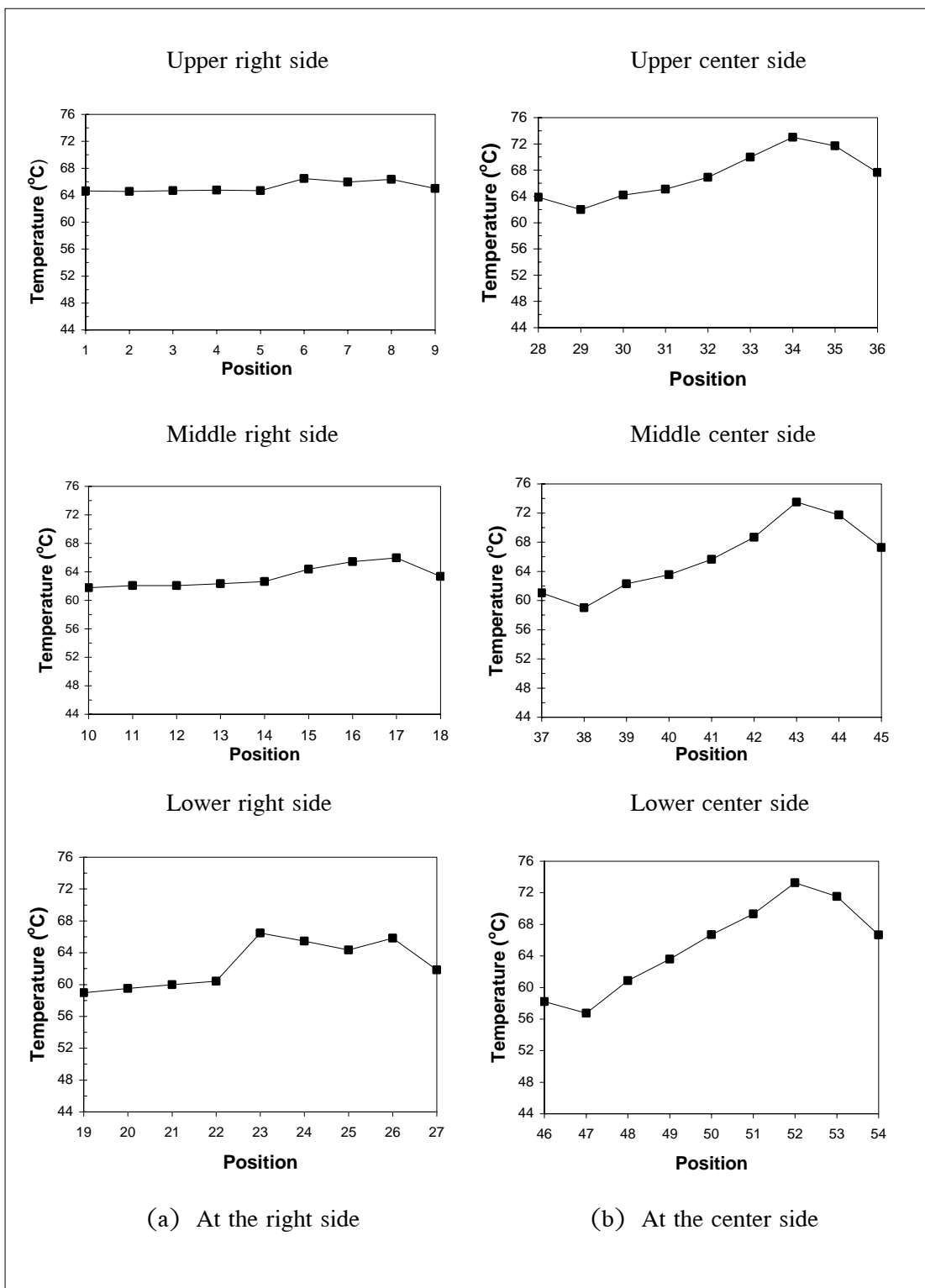
Appendix B

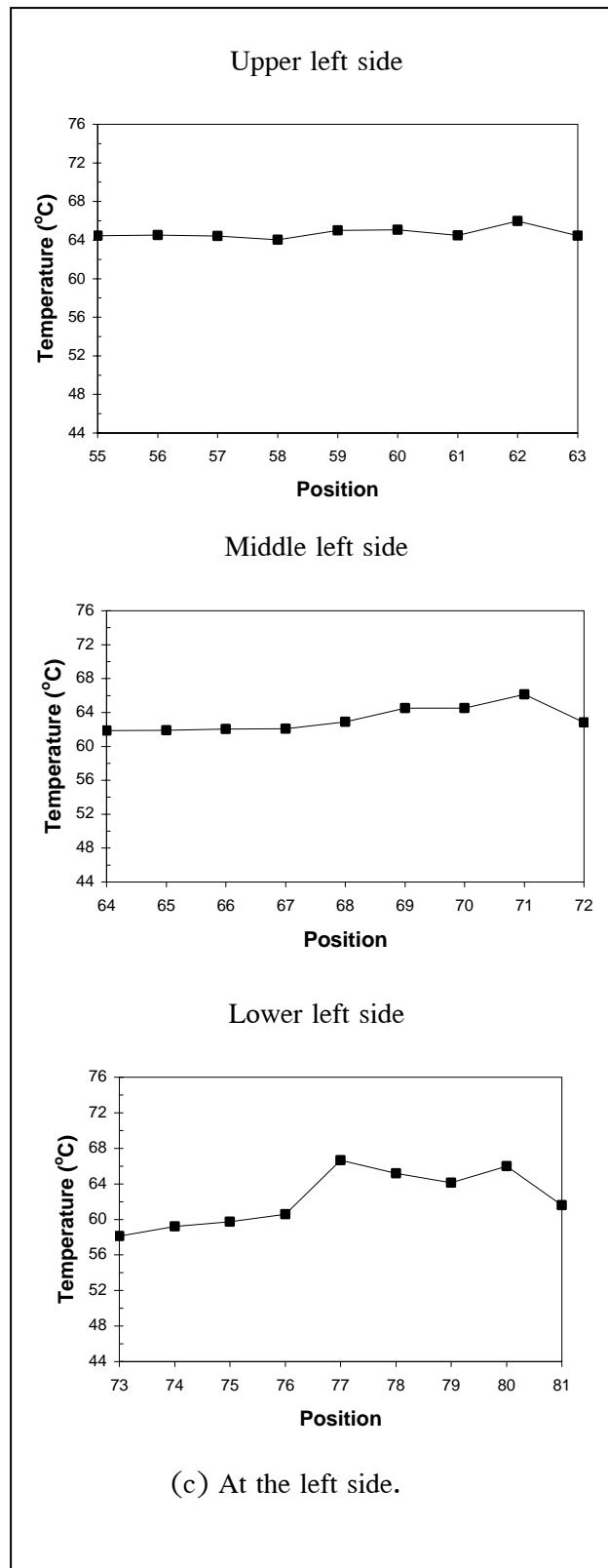
Temperature results of all the case studies

Figures-Appendix B1 Detail of positions of temperature measurement in the rubber smoking room.

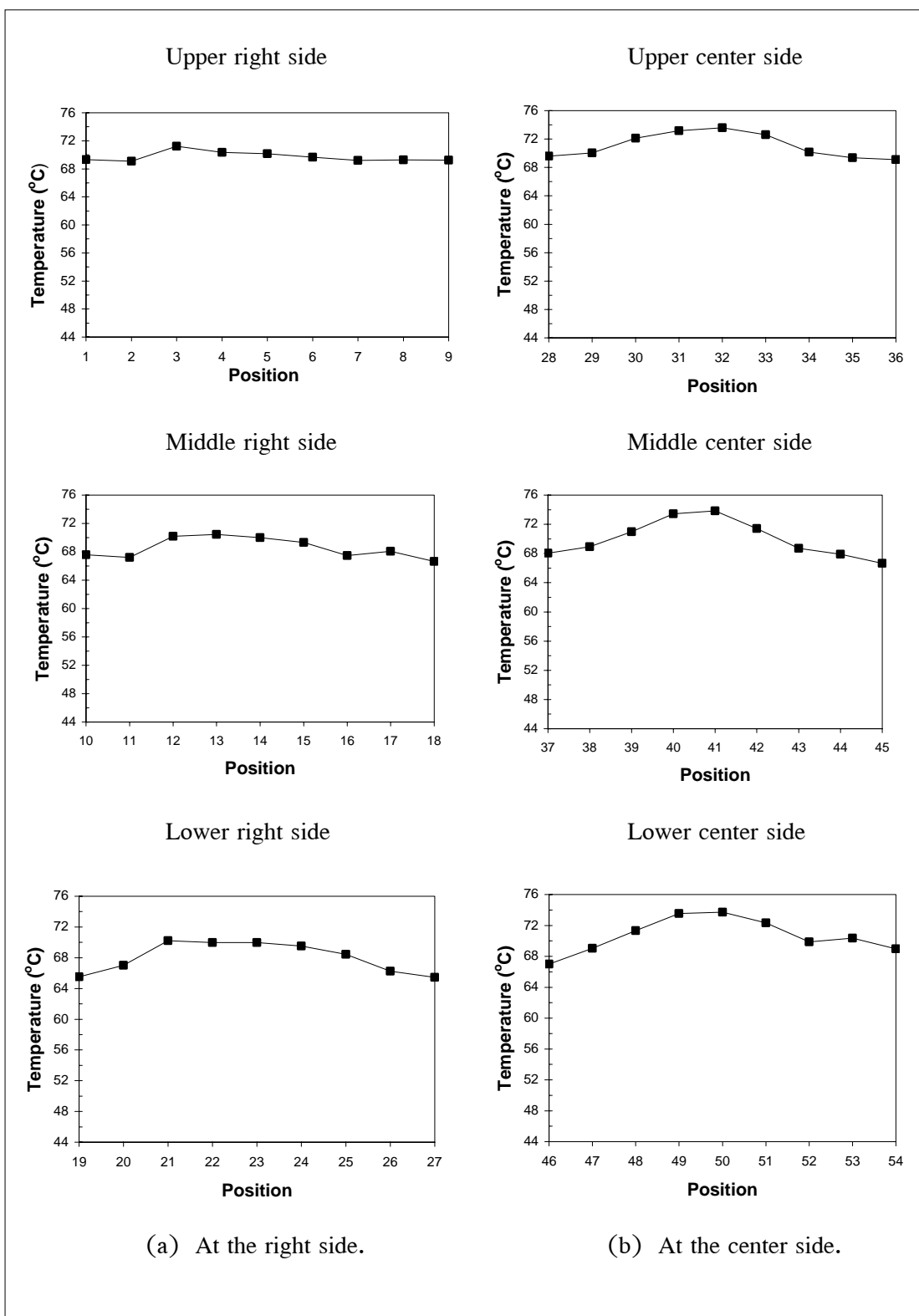


Figures-Appendix B2 Temperature results at 81 positions of the Case 1.

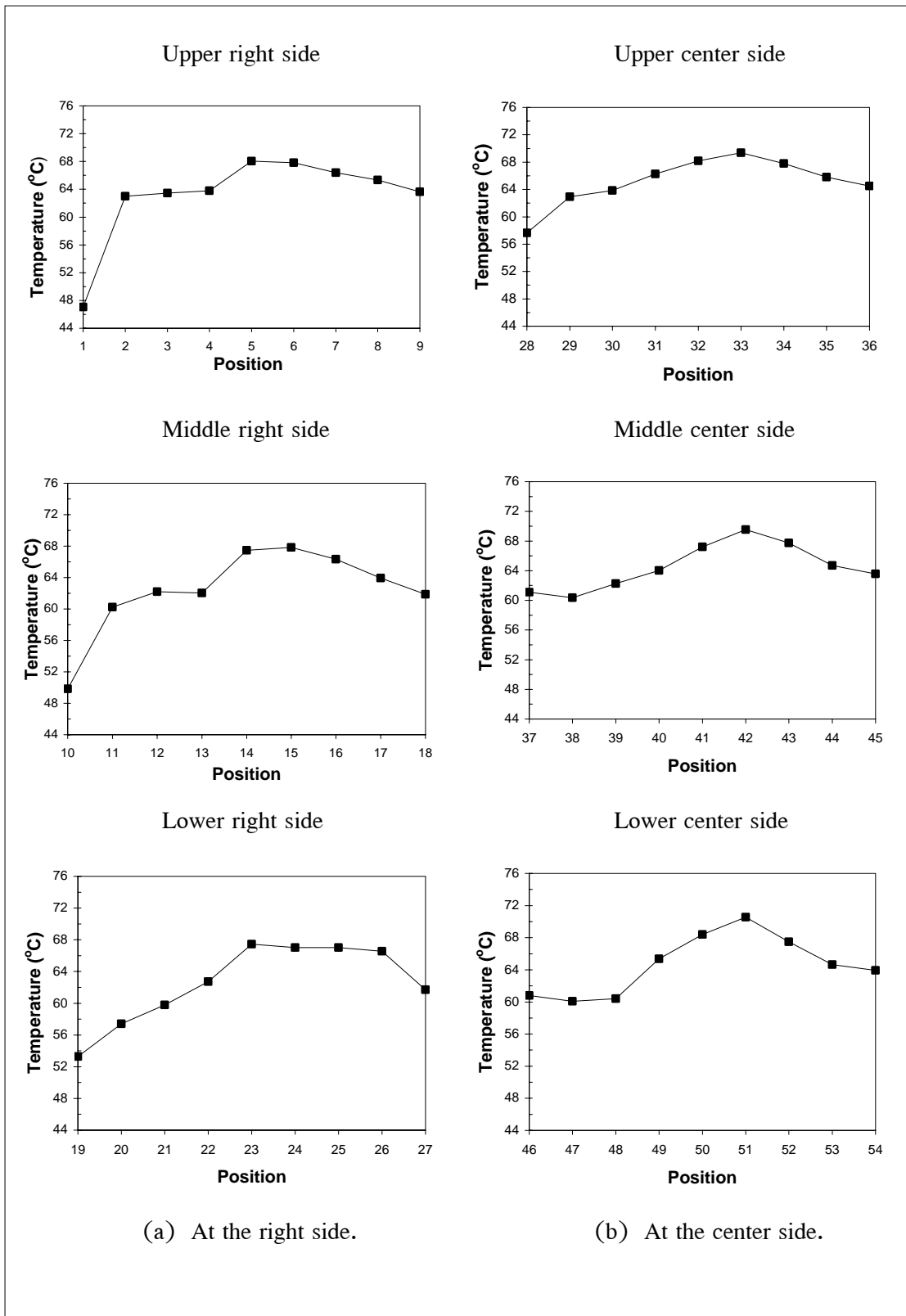




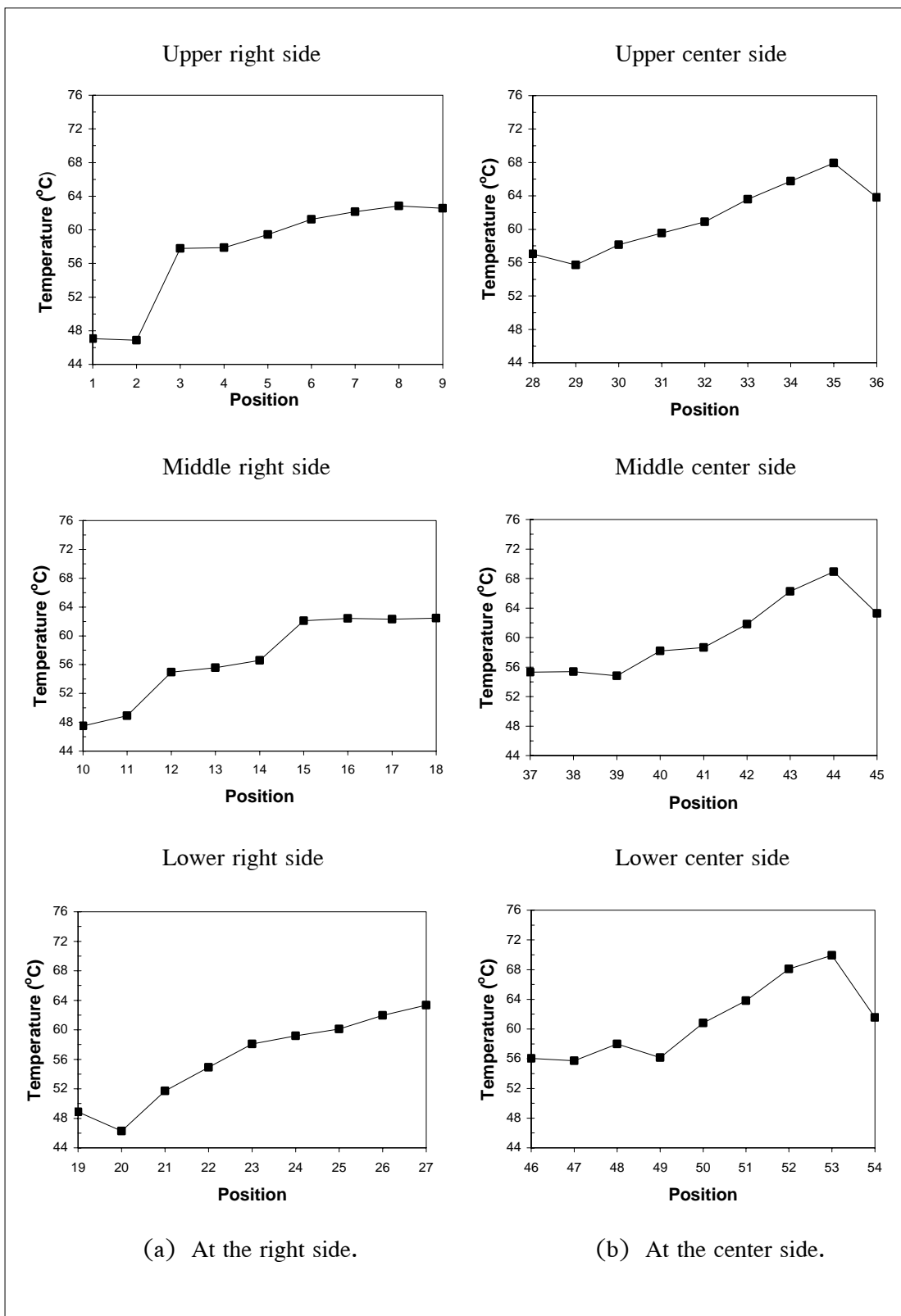
Figures-Appendix B3 Temperature results at 54 positions of the Case 2.



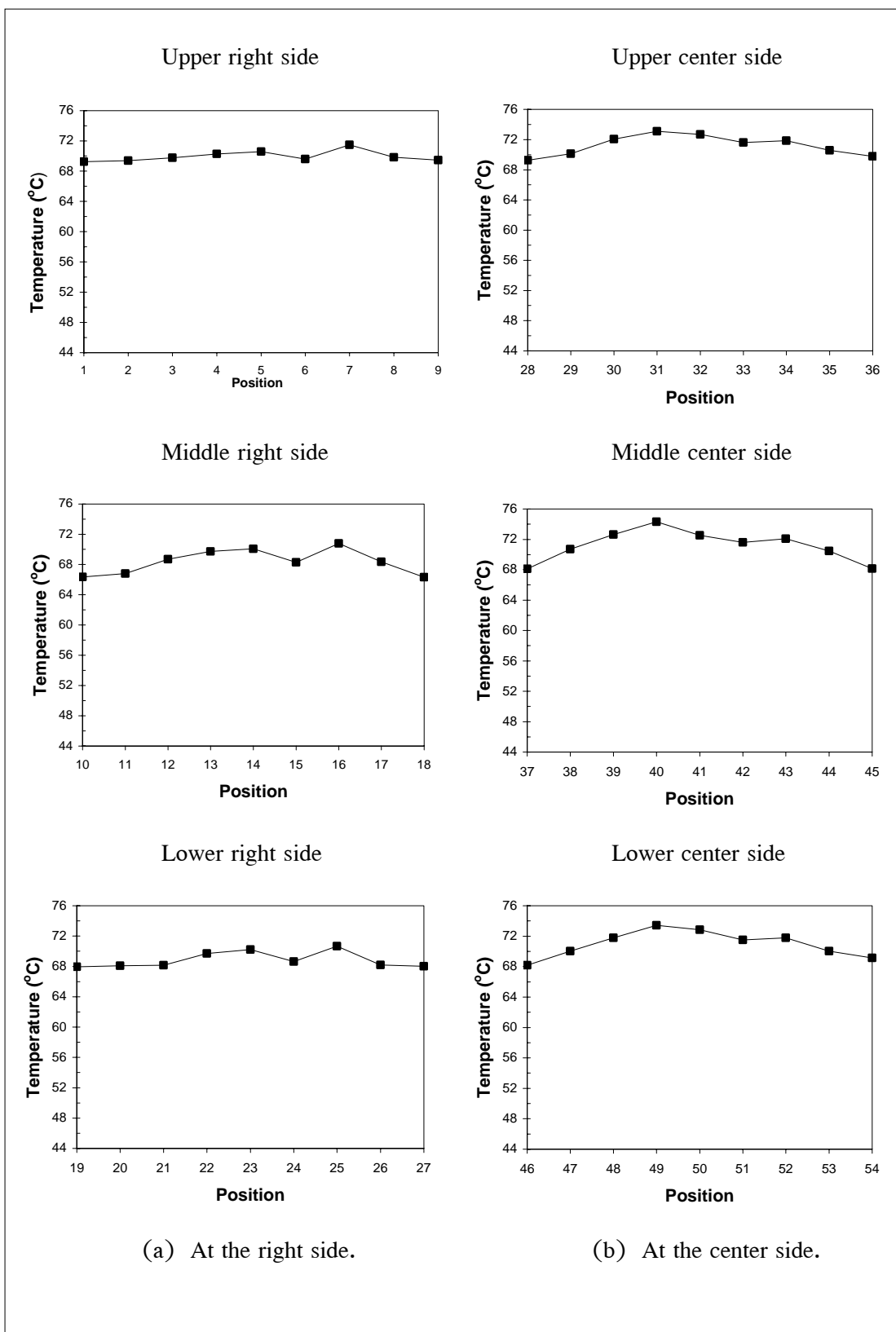
Figures-Appendix B4 Temperature results at 54 positions of the Case 3.



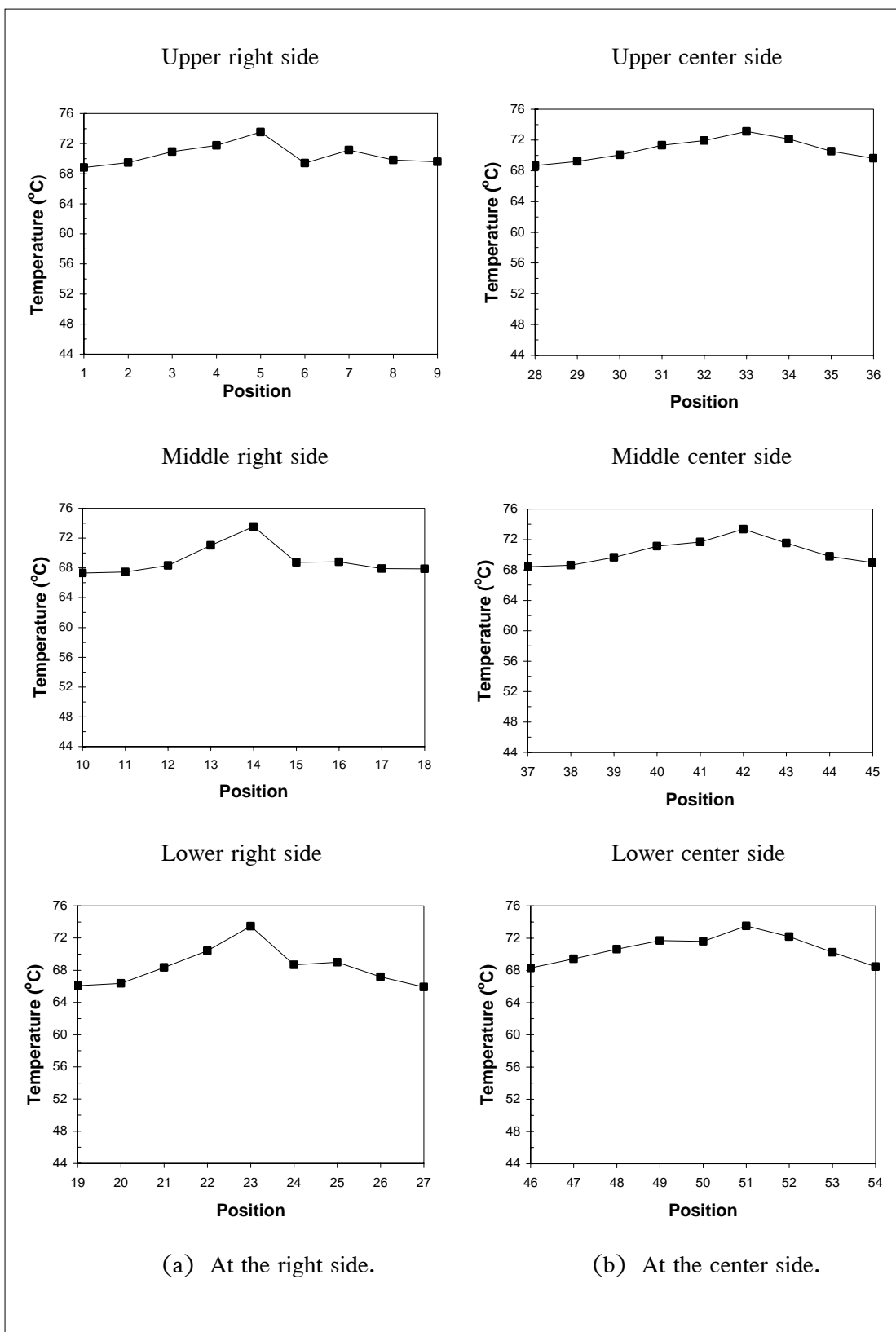
Figures-Appendix B5 Temperature results at 54 positions of the Case 4.



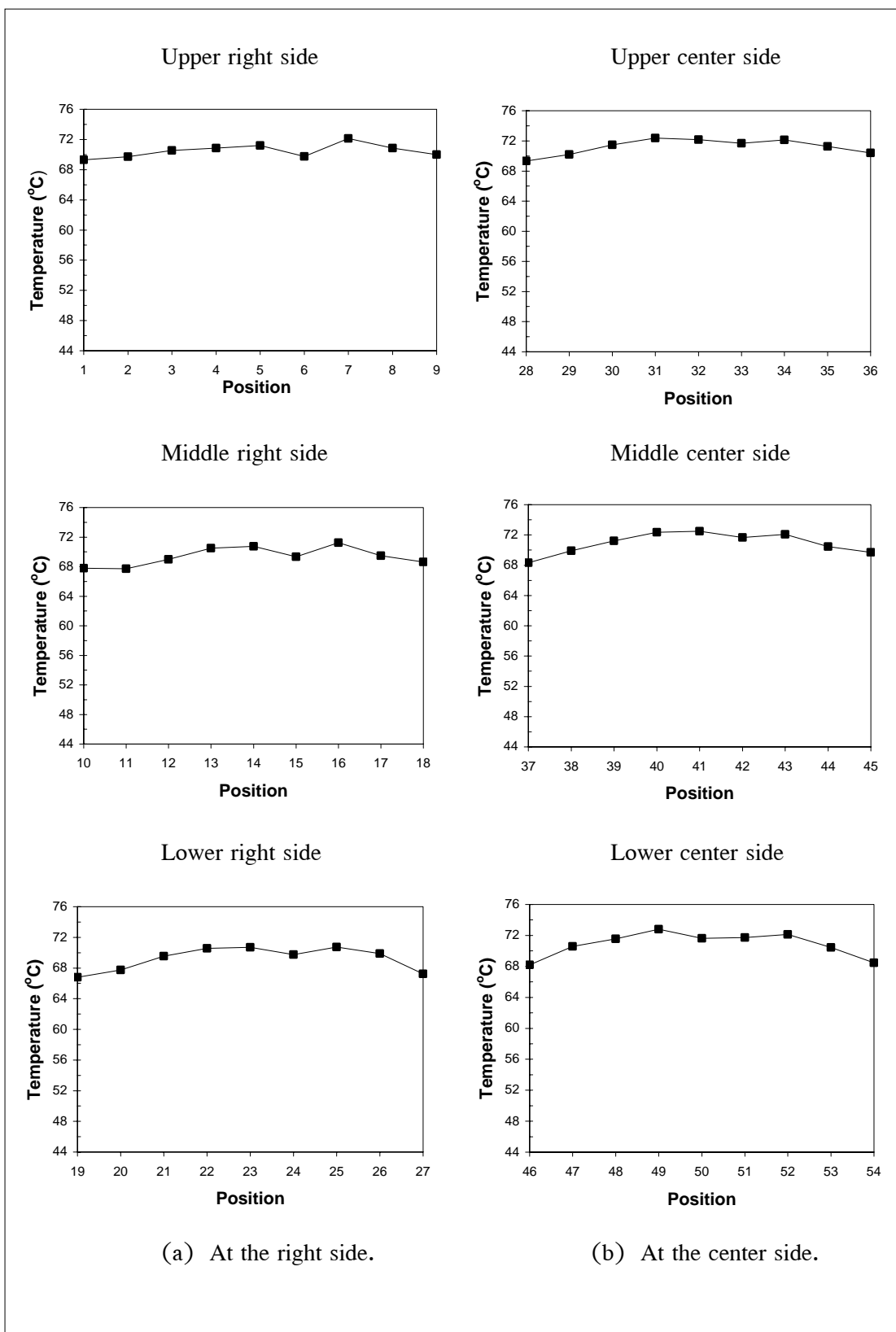
Figures-Appendix B6 Temperature results at 54 positions of the Case 5.



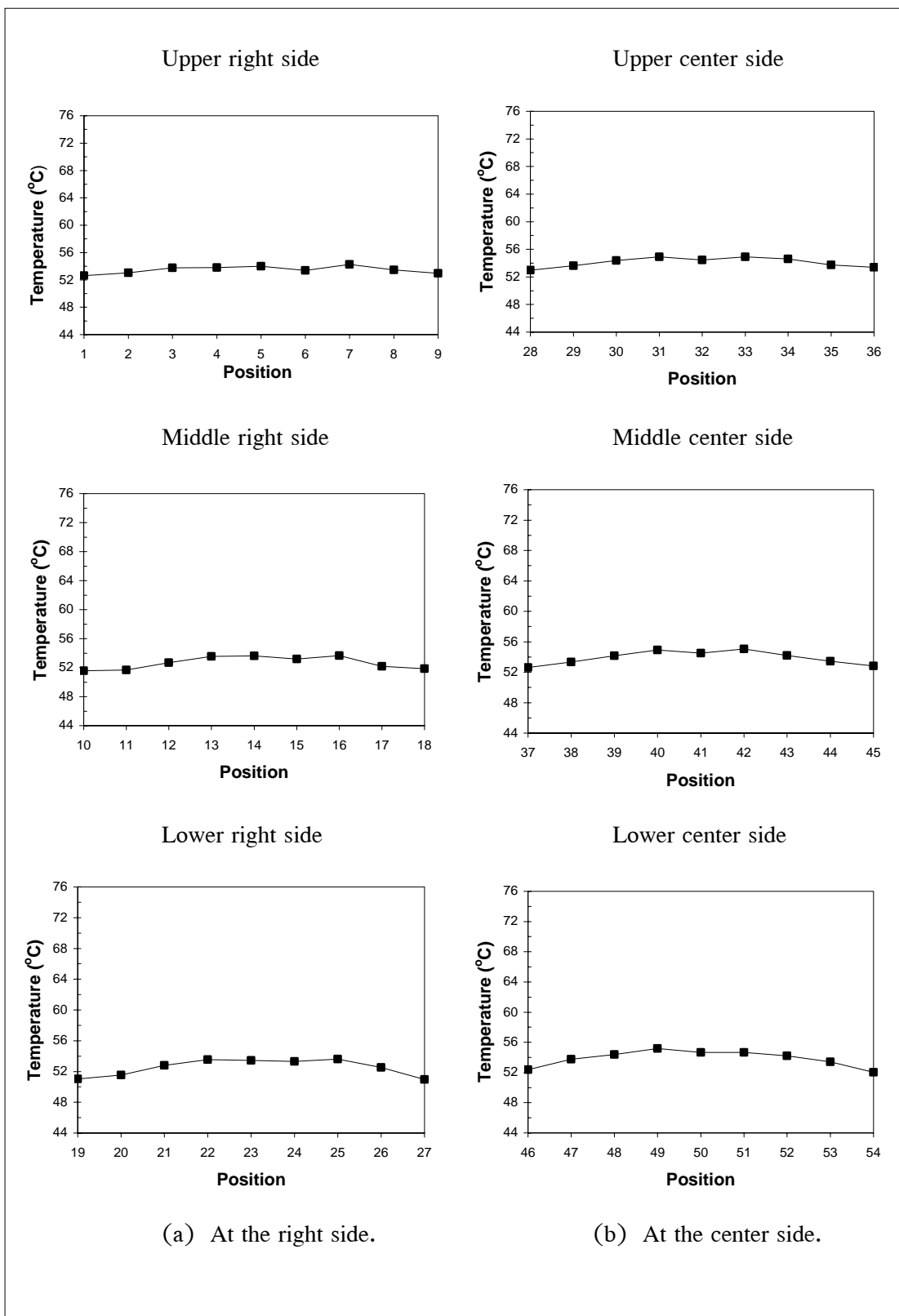
Figures-Appendix B7 Temperature results at 54 positions of the Case 6.



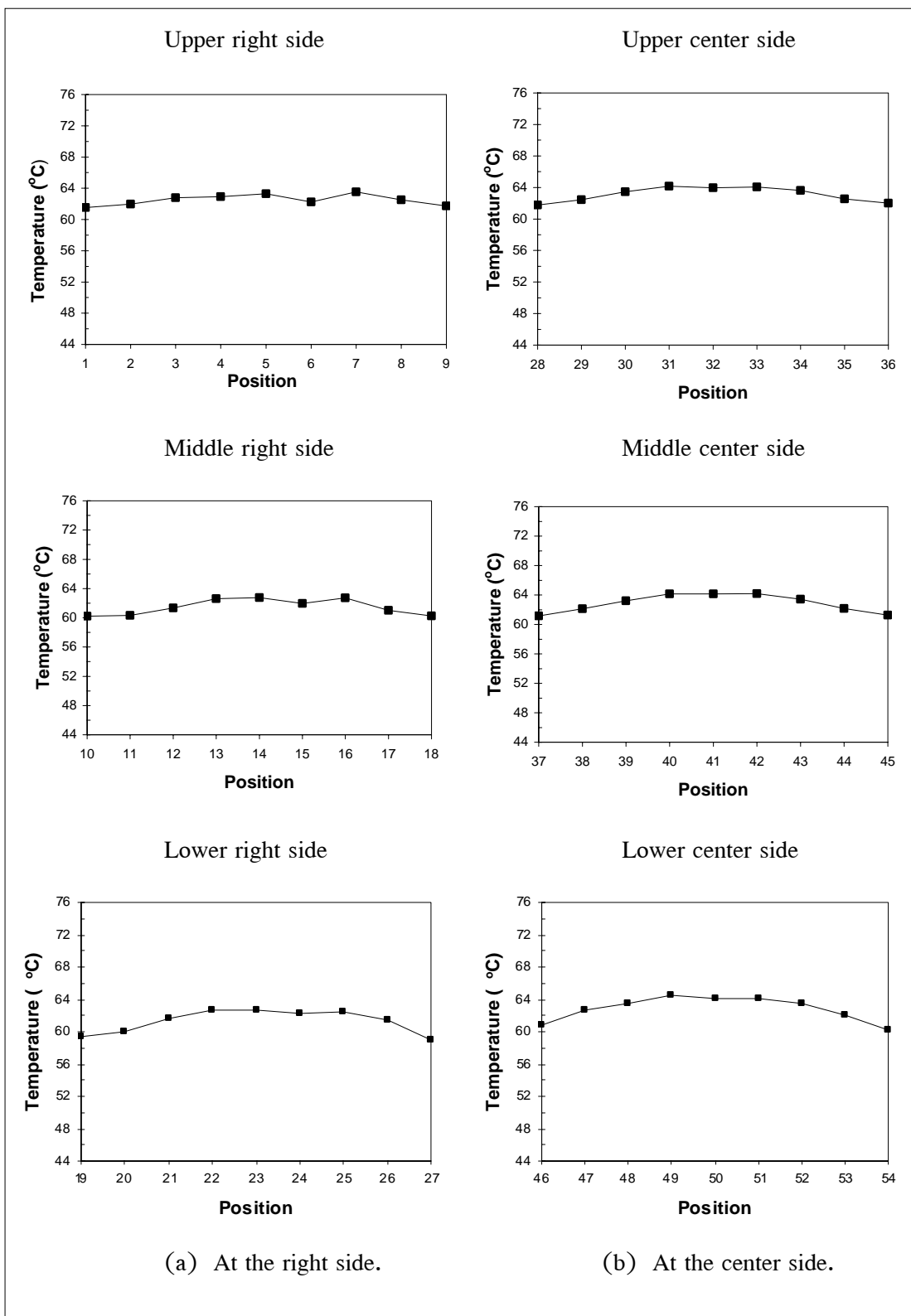
Figures-Appendix B8 Temperature results at 54 positions of the Case 7.



Figures-Appendix B9 Temperature results at 54 positions of the Case 8.



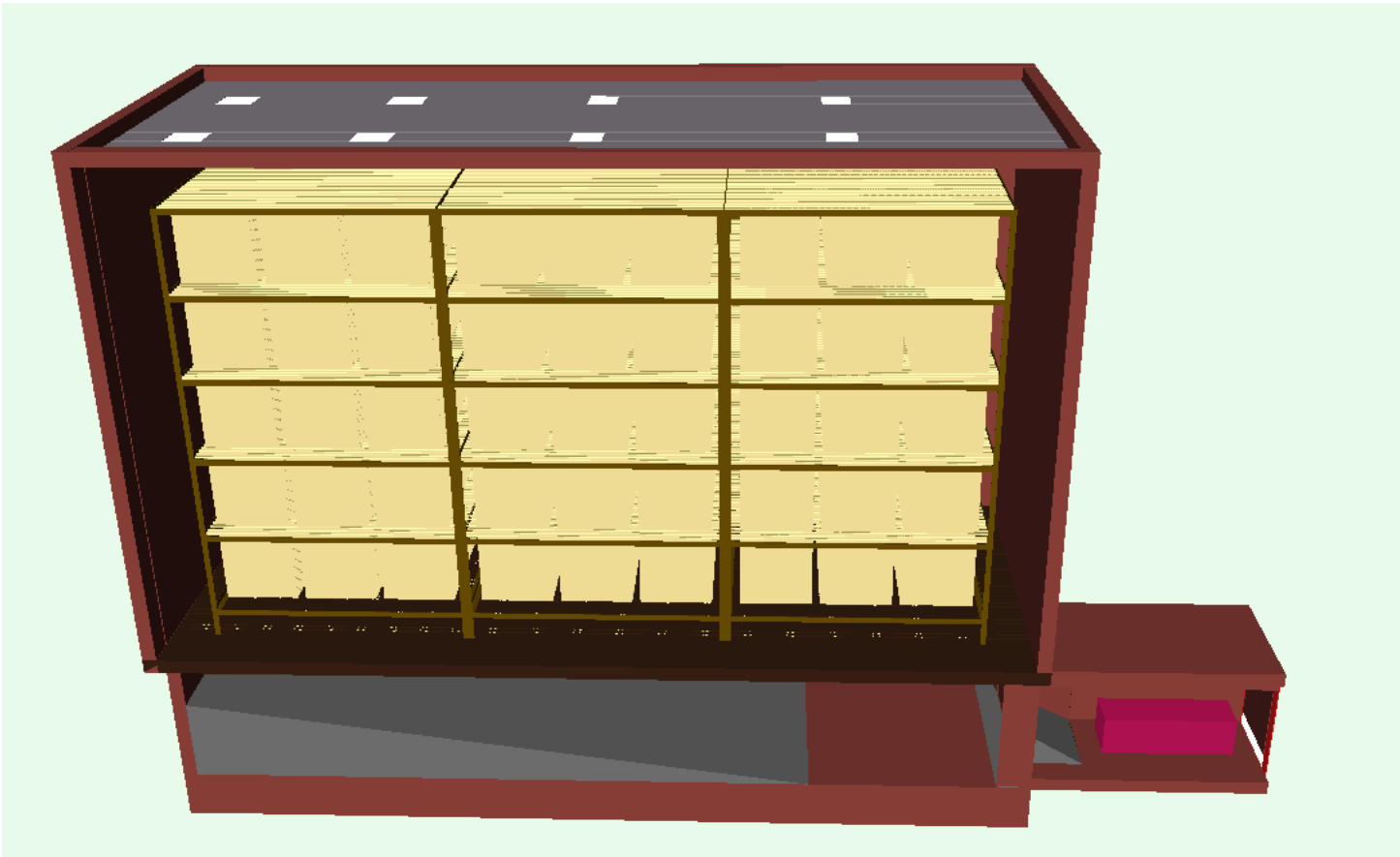
Figures-Appendix B10 Temperature results at 54 positions of the Case 9.



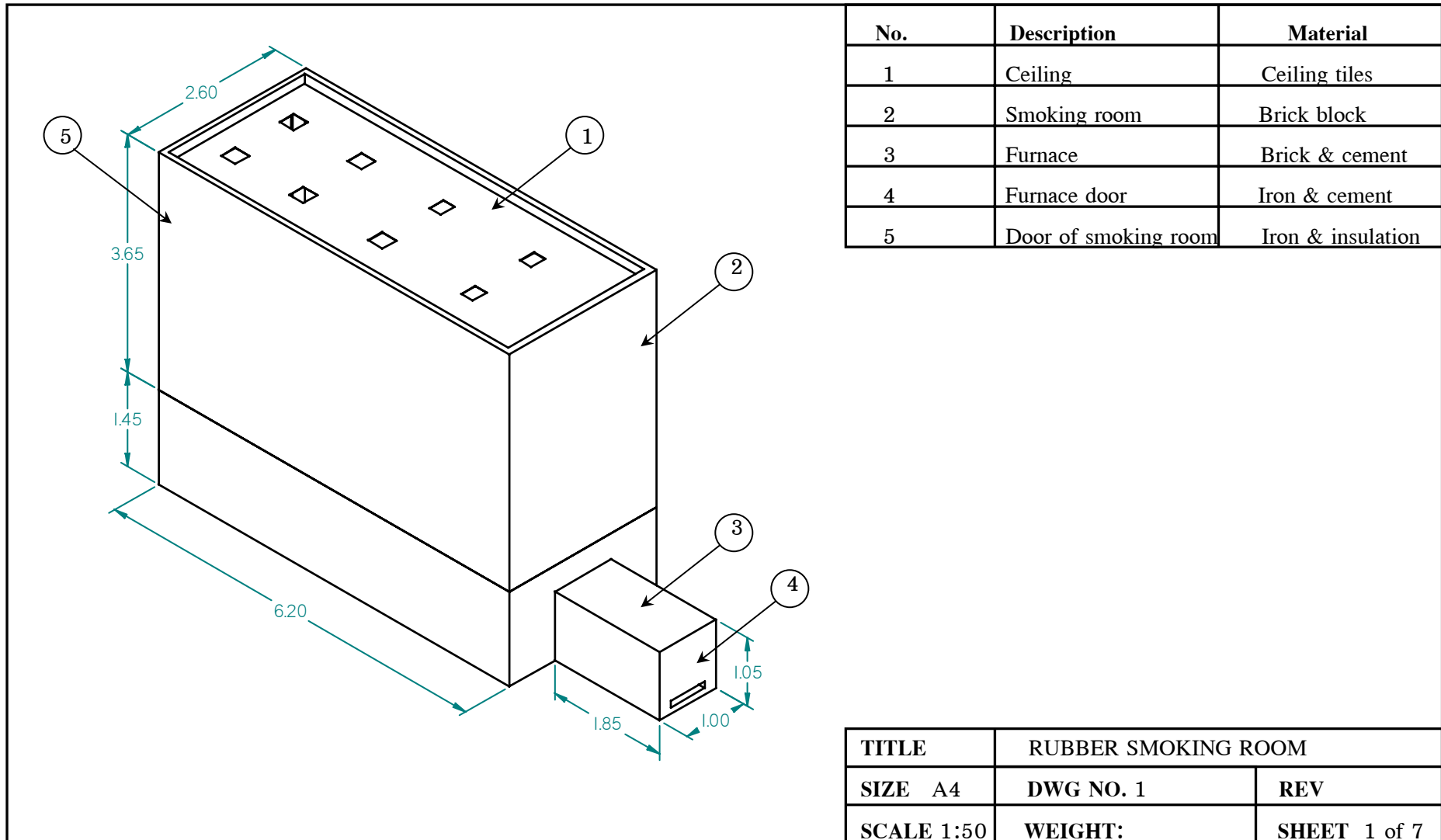
Appendix C

Drawing of a new model of the rubber smoking room

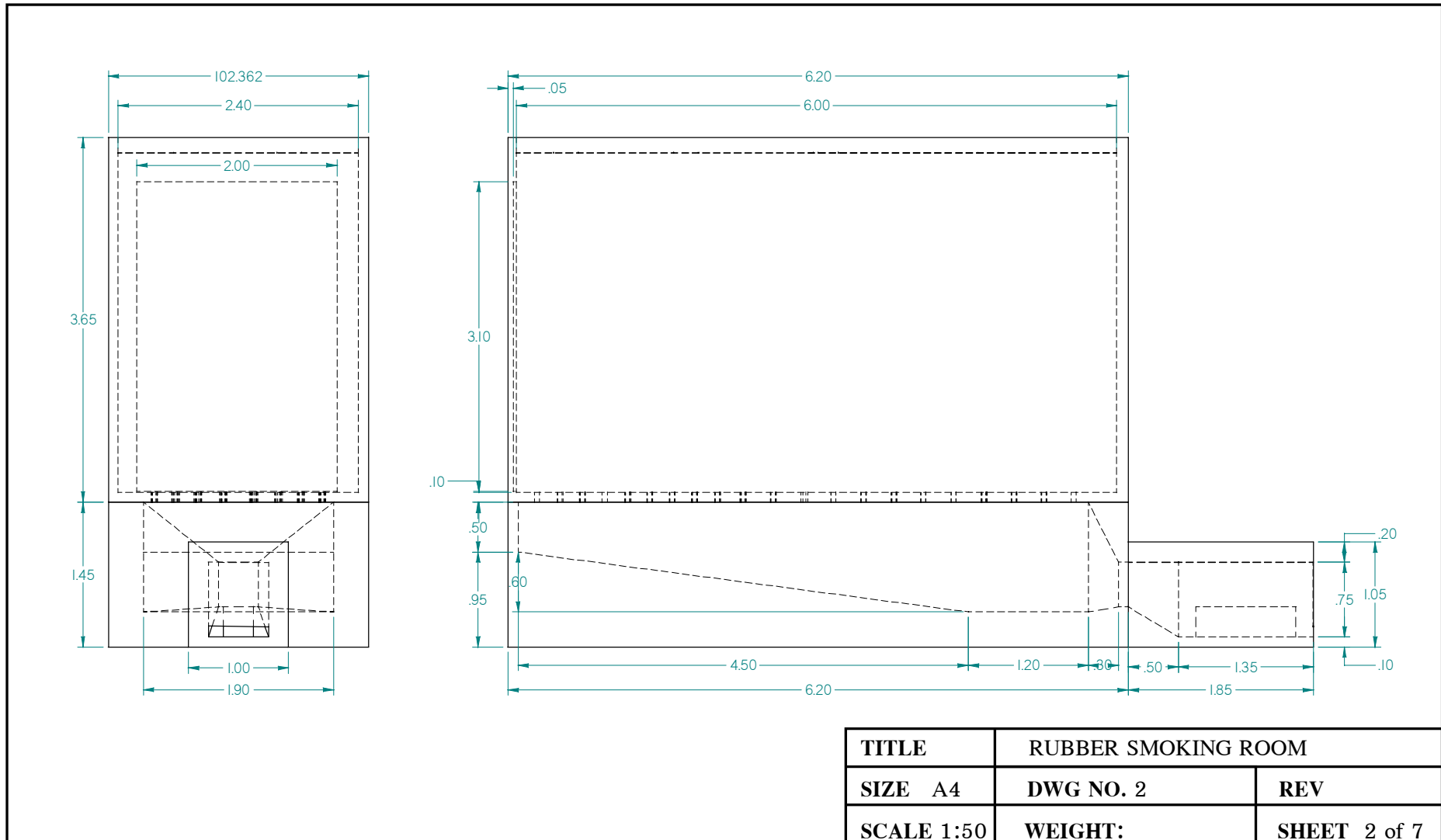
Figures-Appendix C1 All components of a new model of the rubber smoking room shown from side view.



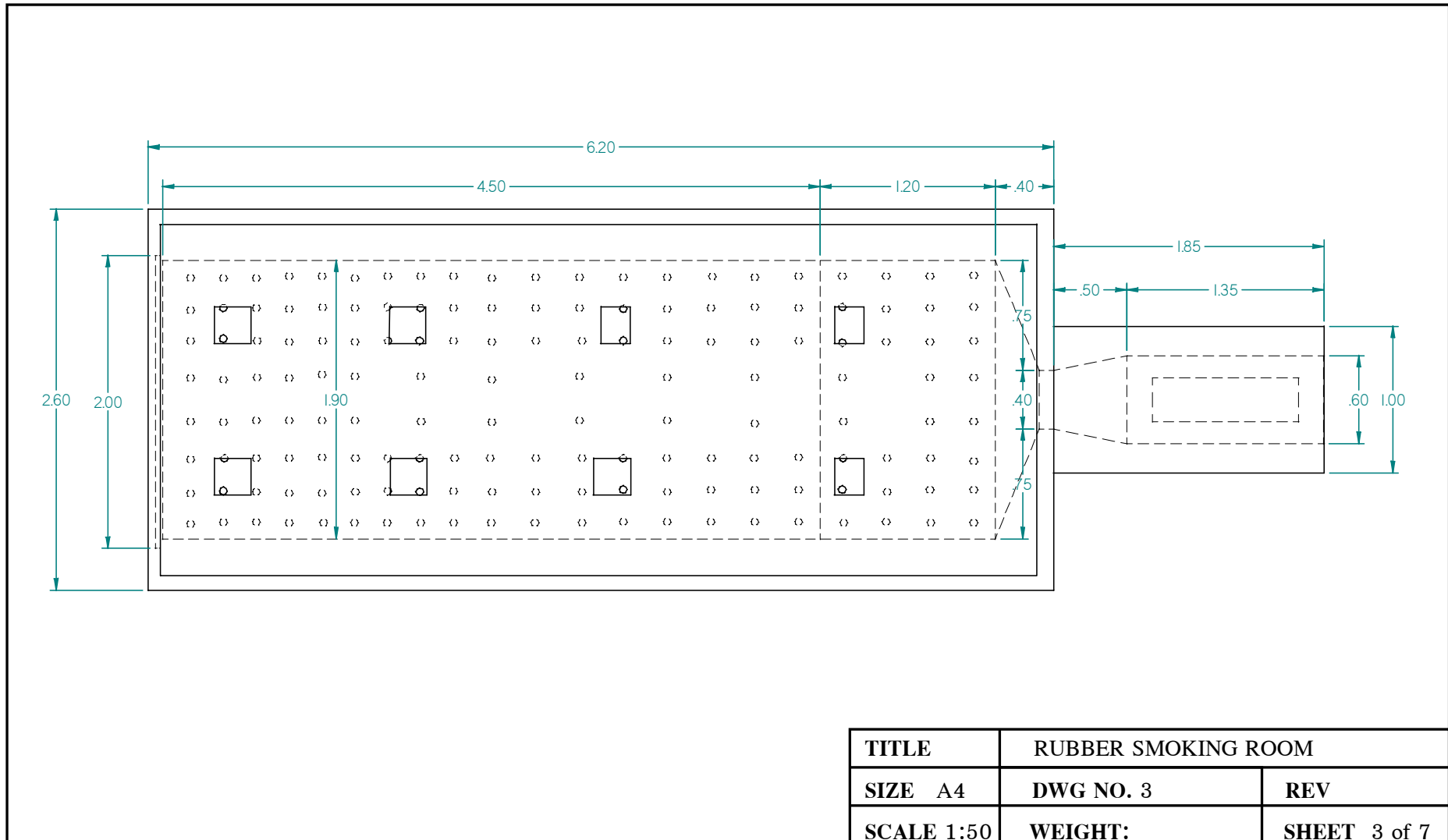
Figures-Appendix C2 Drawing of the isometric view of a new model of the rubber smoking room.



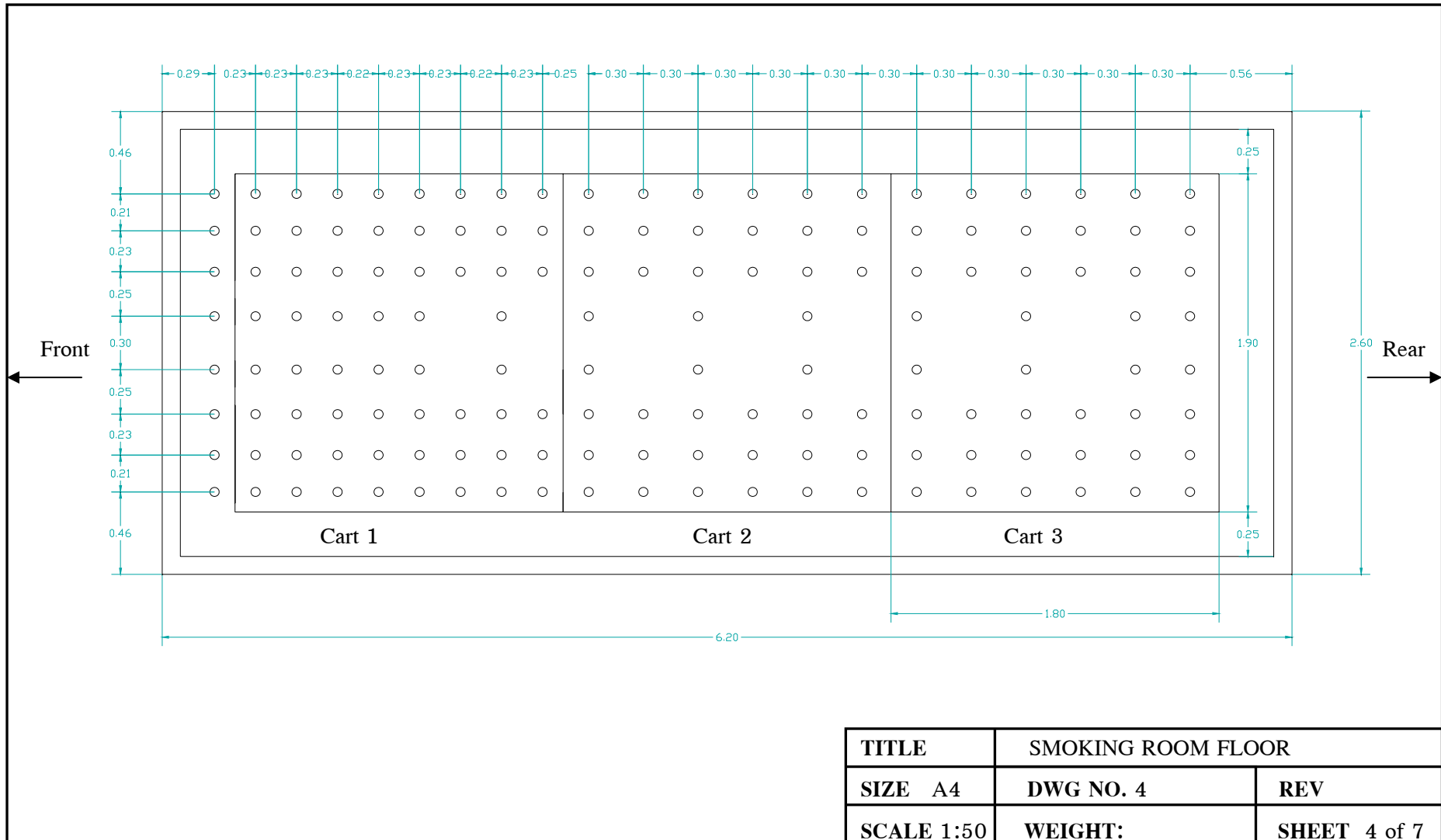
Figures-Appendix C3 Drawing of the front and side views of a new model of the rubber smoking room.



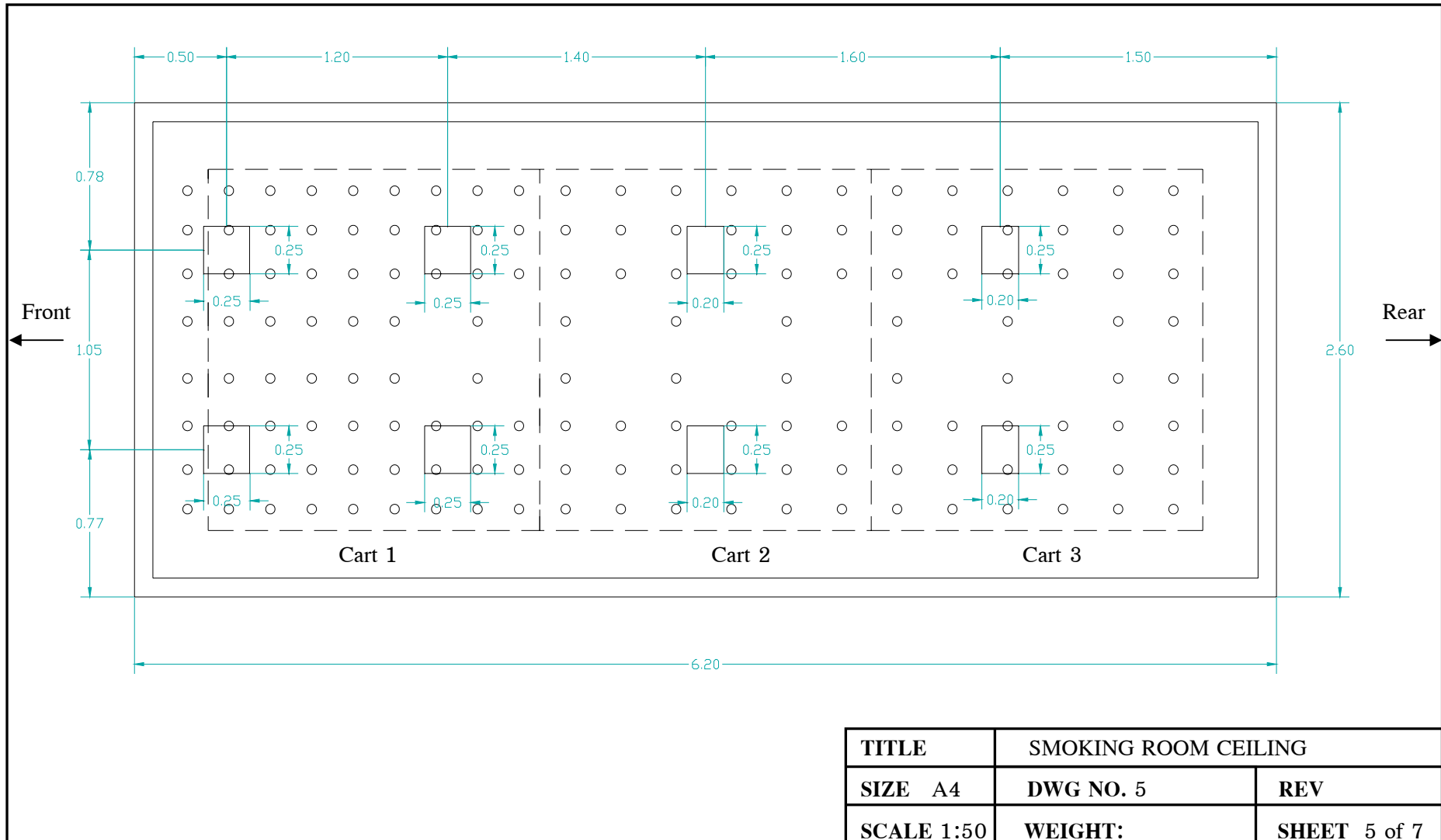
Figures-Appendix C4 Drawing of the top view of a new model of the rubber smoking room.



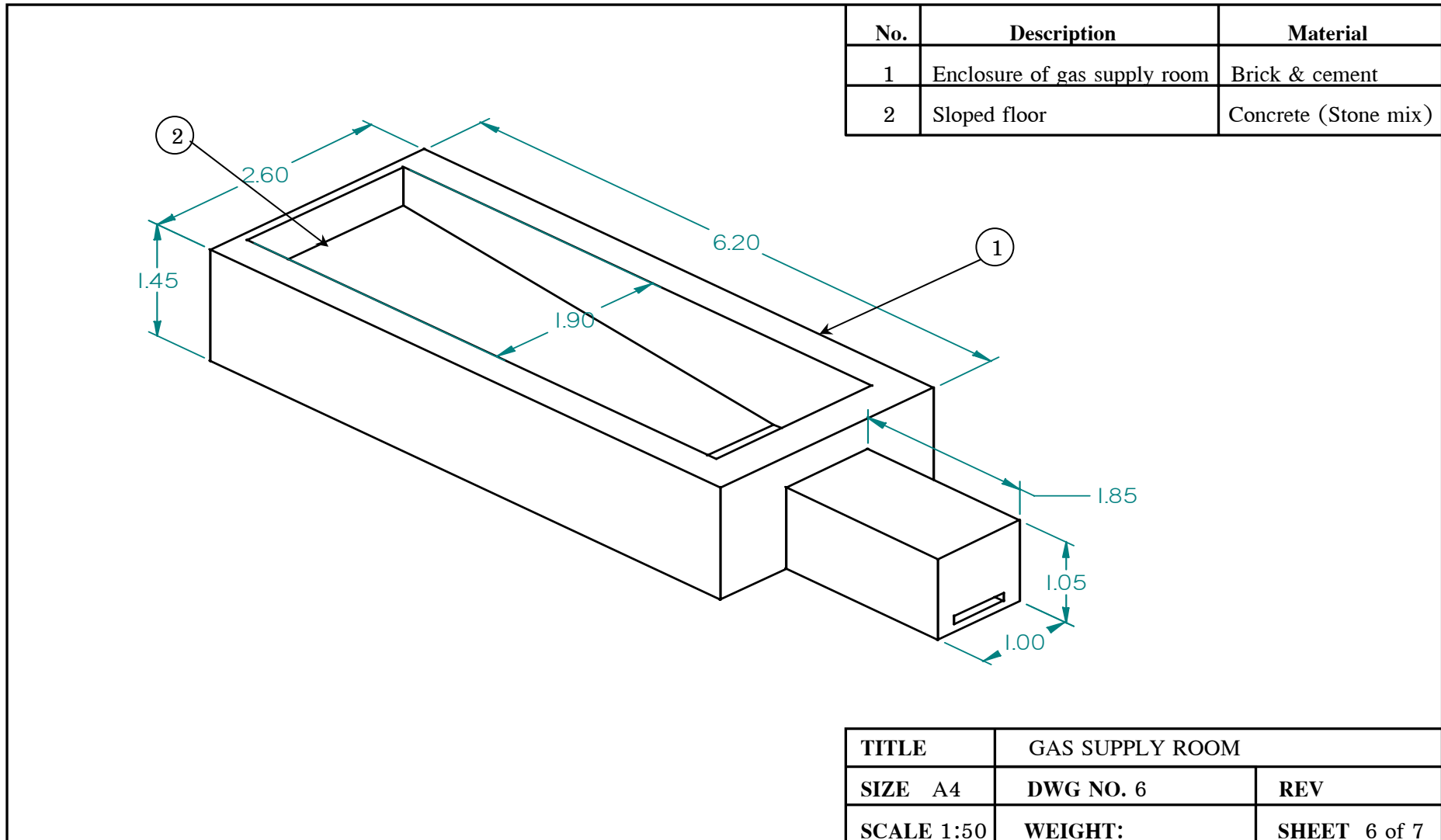
Figures-Appendix C5 Drawing of positions of gas supply ducts of a new model of the rubber smoking room shown from top view.



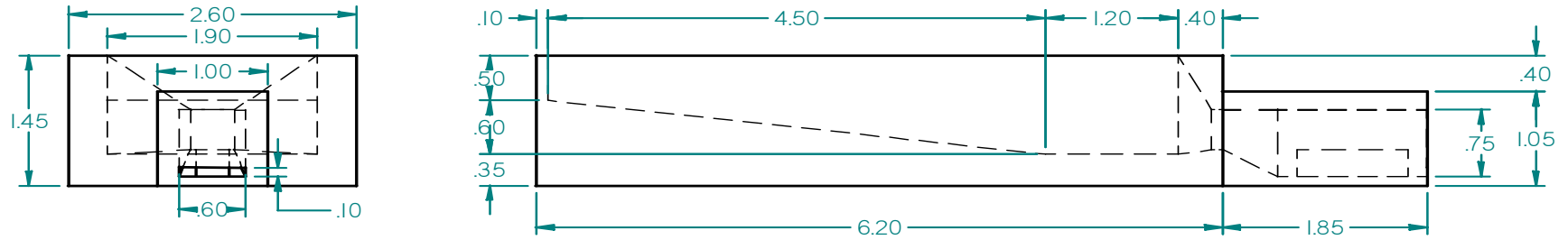
Figures-Appendix C6 Drawing of position of ventilating lids of a new model of the rubber smoking room shown from top view.



Figures-Appendix C7 Drawing of the isometric views of the gas supply room.



Figures-Appendix C8 Drawing of the front, side views of the gas supply room.



TITLE	GAS SUPPLY ROOM	
SIZE A4	DWG NO. 7	REV
SCALE 1:50	WEIGHT:	SHEET 7 of 7