

Electronic Supplementary Material for:

Magnesium oxychloride boards: Understanding a novel building material

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Fig. S1 shows a photograph of water droplets formed on the underside of board B after 24 hrs of the water impermeability test according to BS EN 12467.

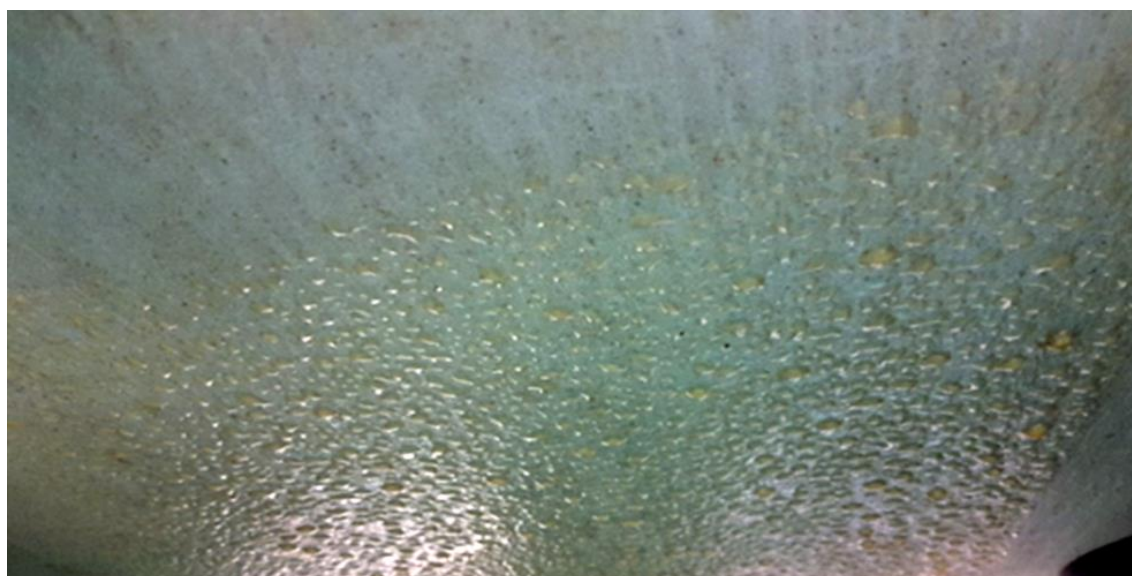


Fig. S1. Photograph of the underside of board B after 24 hrs of the water impermeability test.

Table S1 shows the classification and water absorption coefficient for each board. The values used in the calculation are also shown. Calculations were performed in accordance with BS EN ISO 15148.

Table S1 Water absorption by partial immersion

Board	Type	$\Delta m'_{tf}$	$\Delta m'_o$	t_f	A_w
A	A	0.683	0.21	28800	0.0028
B	A	2.113	0.93	1200	0.0350
C	A	0.478	0.03	28800	0.0026
D	A	2.259	0.02	28800	0.0132
E	A	1.605	0.03	28800	0.0093
F	A	1.489	0.12	14400	0.0114

Fig. S2 shows a photograph of the droplets formed on board B after 50 days of crying test with exposure conditions of 30 °C and 90% RH.

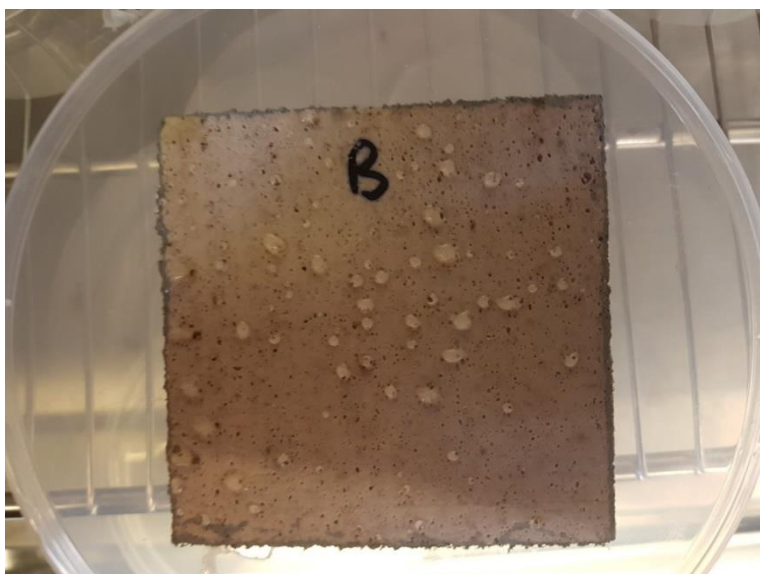


Fig. S2 Photograph of crying droplets on board B following 50 days exposure to 90% RH.