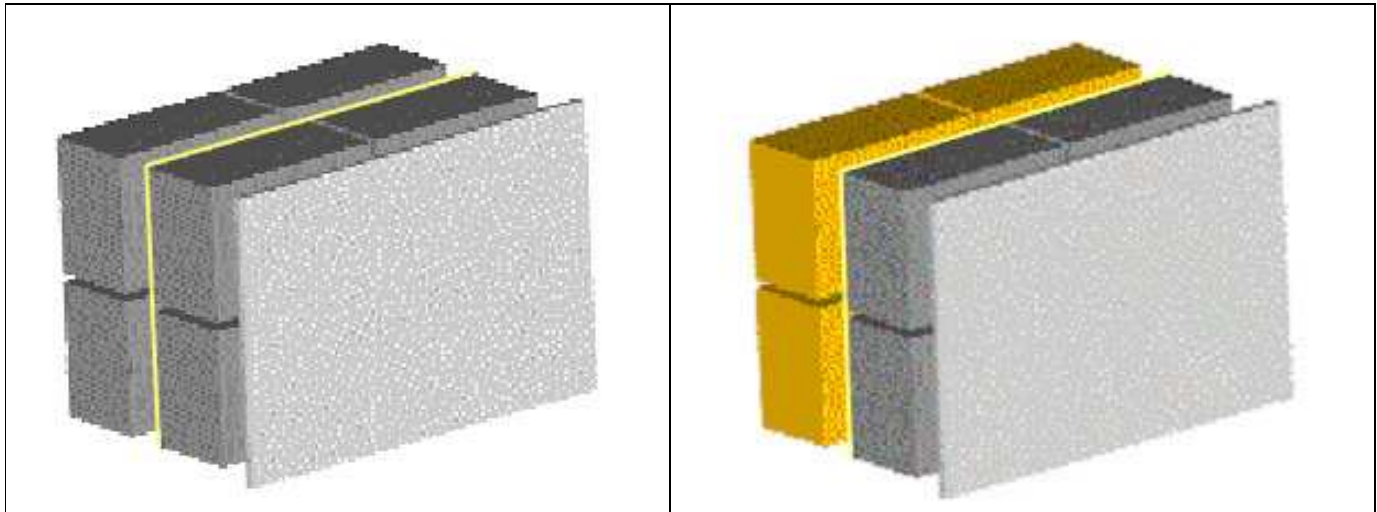




Recommended Cavity Block Type Wall Construction



Rendered Cavity Block Construction

	Resistance R (m ² .K/W)
Outdoor air film	0.03
Render	0.01
90mm Insolite Render Block 10.01	0.51
Reflective air space	0.61
25mm Foil board	0.60
90mm Insolite Render Block 10.01	0.51
Render	0.01
Indoor air film	0.12
Total Resistance =	2.40

HeritageStone Cavity Block Construction

	Resistance R (m ² .K/W)
Outdoor air film	0.03
90mm standard Heritage stone	0.15
Reflective air space	0.61
25mm Foil board	0.60
90mm Insolite Render Block 10.01	0.51
Render	0.01
Indoor air film	0.12
Total Resistance =	2.03

SEMF is a leading Tasmanian Engineering Consultancy who can provide advice in relation to nearly all areas of the engineering & environmental industry. In particular SEMF have extensive experience in Sustainable Design & can provide you with services ranging from Residential and Commercial building Energy Ratings; Energy Efficient building design advice; Environmental auditing; through to all engineering design services.

The above recommended design types, utilising Island Block & Paving's concrete block construction systems meet the requirements of the BCA to ensure minimum insulation and energy requirements are implemented in new residential buildings. The new BCA requirements for energy efficiency require a minimum Insulation or "R" value of 1.9 m².K/W for buildings within Tasmania's Zone 7 Classification. As can be seen from the above wall options the Island Block solutions have a much greater R value than other construction techniques. The Island Block and Paving options are economical, impact resistant, fire resistant and exceed the minimum BCA energy efficiency requirements for heat loss control. **Additional benefits are that concrete block construction provides thermal mass to the building, which improves internal temperature stability.**

The above solution utilises an integral reflective foil and polystyrene insulation product. A range of alternative insulation materials exists which could be installed in this option. In addition a higher level of detail in the wall construction, which provides a reflective air space, will improve the system thermal characteristics.