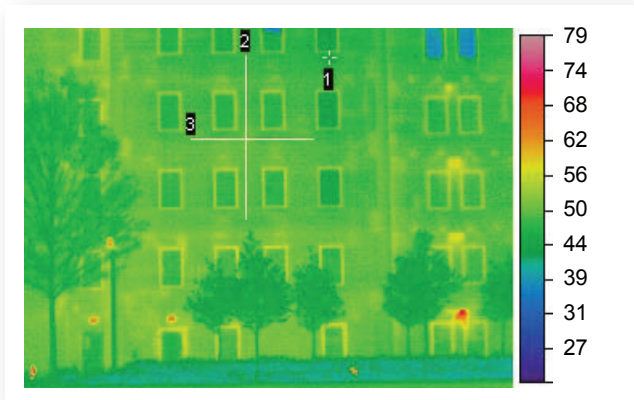


THERMAL PERFORMANCE OF PRECAST CONCRETE

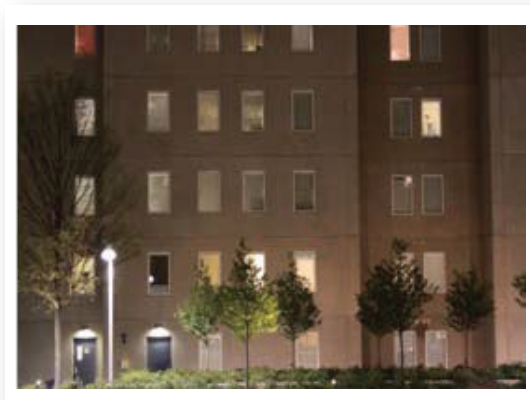
Stores energy and dampens effect of temperature change

- Mitigates heat transfer and energy loss
- Reduces indoor temperature fluctuation to improve occupant comfort
- Enables downsized HVAC system and decreased first costs

Thermal Imaging: Precast Wall System

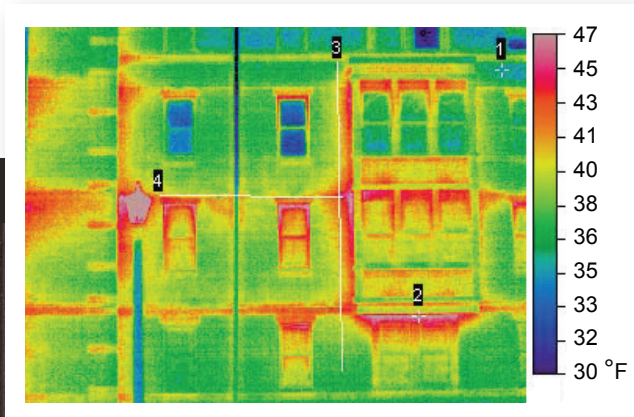


University Commons at GSU

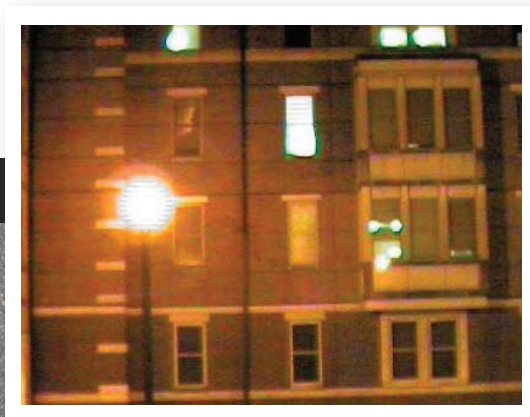


Visible light image

Thermal Imaging: Cavity Wall System



A dormitory building



Visible light image

This continuous insulated University of Pennsylvania building uses a thermomass® system with Poly-Polyisocyanurate insulation that delivered a R-24 performance.



thermomass

Performance Study Summary

Salinas Project - Salinas, CA

		North	East	South	West	
Low-Mass Building	Cooling Load for Designed Wall					Steady-State Wall R-value
	WCc	1.226	2.361	2.371	3.156	26.00
	WC Total	9.1142059				
	Btu Consumption	9,114,206				
	Heating Load for Designed Wall					Steady-State Wall U-value
	WCh	0.392	0.479	0.616	0.463	0.0385
	WC Total	1.9500714				
	Btu Consumption	1,950,071				
	Total Estimated Load					Wall Heat Capacity
	WC Total	11.0642772				1.00
Btu Consumption	11,064,277					
Note I: Btu's consumed equals 1,000,000 x Wall Criteria (WC)						
Note II: A negative sum of the Wall Criteria results in a zero value for final calculation						
Thermomass	Cooling Load for Designed Wall					Steady-State Wall R-value
	WCc	0.544	1.944	1.794	2.504	11.67
	WC Total	6.7855699				
	Btu Consumption	6,785,570				
	Heating Load for Designed Wall					Steady-State Wall U-value
	WCh	0.627	0.596	0.607	0.567	0.0857
	WC Total	2.3966862				
	Btu Consumption	2,396,686				
	Total Estimated Load					Wall Heat Capacity
	WC Total	9.1822562				25.63
Btu Consumption	9,182,256					
Note I: Btu's consumed equals 1,000,000 x Wall Criteria (WC)						
Note II: A negative sum of the Wall Criteria results in a zero value for final calculation						

This thermal mass, analytical comparison results in the Thermomass wall behaving as a wall with a material R-value of:

26.00+

MAKE A CONCRETE IMPRESSION