

...OF REGIONAL INTEREST IN HEALTH CARE...

# DESIGN FOR SEISMIC EVENTS



ACCOMMODATE LATERAL DRIFT  
AND TRANSFER INERTIAL LOADS

To properly engineer windows and curtainwall to withstand earthquakes, parameters specific to the building and site must be considered. Hospitals are Occupancy Category IV, considered essential facilities, with the highest Importance Factor multipliers applied to movements and forces.

Windows and curtainwall must elastically accommodate lateral seismic drift without loss of weather resistance or glass breakage. Under inelastic movements, safety of occupants and passersby is critical. In addition, inertial forces must be safely transferred to the building structure.

Early design coordination with adjacent wall system movement and anchorage provisions is essential, to maintain overall envelope integrity.

Allowable Story Drift $\Delta a$ (Where h is story height)			
Structure	Occupancy Category		
	I or II	III	IV
Structures, other than masonry shear wall, four stories or less with interior walls, partitions, ceilings and exterior wall systems that have been designed to accommodate the story drift.	0.025h	0.020h	0.015h
Masonry cantilever shear wall structures	0.010h	0.010h	0.010h
Other masonry shear wall structures	0.007h	0.007h	0.007h
All other structures	0.020h	0.015h	0.010h

Design movements may be less than these maximum allowable design movements.

Occupancy Importance Factor (I) (Table 11.5-1)	
Occupancy Category	Importance Factor I
I or II	1.00
III	1.25
IV	1.50

Importance Factor is a direct multiplier when forces for the building are determined.

Source: ASCE/SEI 7-05 Standard: Minimum Design Loads for Buildings and Other Structures.



UCLA Ambulatory Care Pavilion  
DMJM (AECOM) Architects



# INTEGRATED DESIGN SUPPORT FOR OSHPD

Wausau systems have been approved by the California Office of Statewide Health Planning and Development (OSHPD) on more than 40 hospital projects in the past 10 years, helping ensure health care services remain available during and after major seismic events.

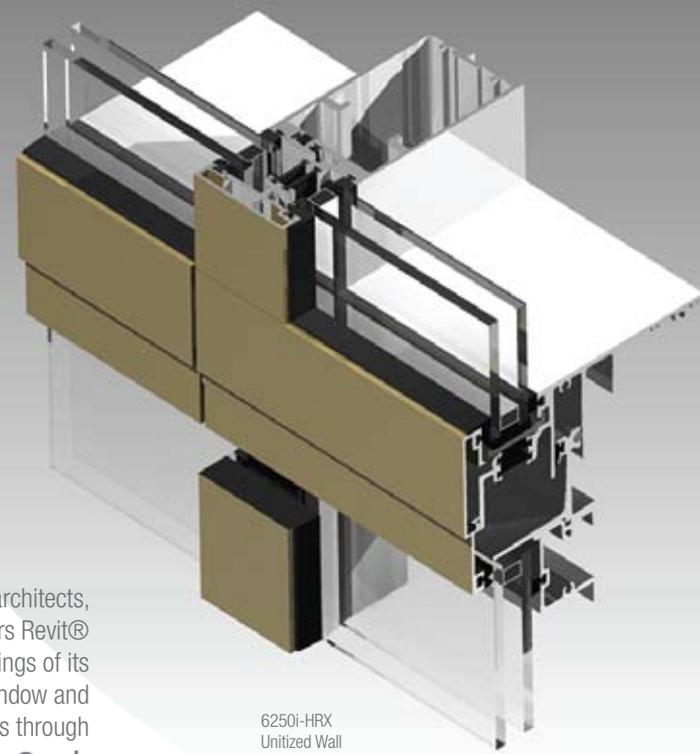
Through strict adherence to OSHPD administrative and technical requirements, project approvals are obtained in a timely manner.

Special attention is given to integrated design aspects of system interface, coordination of detailing and structural calculations, and Building Information Modeling (BIM) protocols. Wausau is often called on to take the technical lead in envelope seismic design.

In addition, Wausau offers high-performance, NFRC-certified products, to address the most stringent energy efficiency requirements of California Code of Regulations (CCR) Title 24.

Wausau offers architects, engineers and designers Revit® 3D models and 2D drawings of its most popular window and curtainwall systems through

**Autodesk® Seek**



6250I-HRX  
Unitized Wall

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