



Emerald Trail Elementary School

Rosemount, MN



Stacked Window Design Meets FEMA Requirements, Daylighting Desires

Emerald Trail Elementary School in Rosemount, Minnesota, is a new build designed to address the needs of an ever-growing student population in the southern portion of the Rosemount-Apple Valley-Eagan Public Schools.

Key elements of its design are sustainability, community, and safety. Winco delivered a critical safety element as the gymnasium was designed to be a FEMA-approved storm shelter. Winco worked with the architects to ensure that the windows met FEMA/ICC 500 requirements while fulfilling the design intent for large amounts of natural light in the storm shelter.

PROJECT DETAILS

Systems Provided

Series

FEMA 361 – ICC 500 Tornado
3250

Market

Education K-12

Features

Tornado Resistant

Project Team

Owner

Rosemount-Apple Valley-Eagan
School District

Architect

Wold Architects and Engineers

General Contractor

Knutson Construction

Glazing Contractor

Hentges Glass

Representative

John Iffland





To meet the design intent of the building, the team implemented a creative solution that divides the opening into two separate windows by a steel tube. This allowed massive windows for maximum daylight while still being tornado impact rated. This novel solution was the result of an excellent collaboration between Winco and the architects at Wold.

Winco also supplied 3250 series windows, side stacked with a sloped leg and sleek, minimal sightlines. Both FEMA 361 - ICC 500 Tornado and 3250 window series were chosen for their strength, thermal capacity to withstand temperature changes and stronger winds, and their simple lines which provide a modern aesthetic and plenty of wide-open views to the outside.

