





Lotte Super Tower

Project Description:

Duration: 2010 ~2016

Location: Seoul, Republic of Korea

Design: 1. Foreign; KPF (USA)

2. Domestic; Baum (ROK)

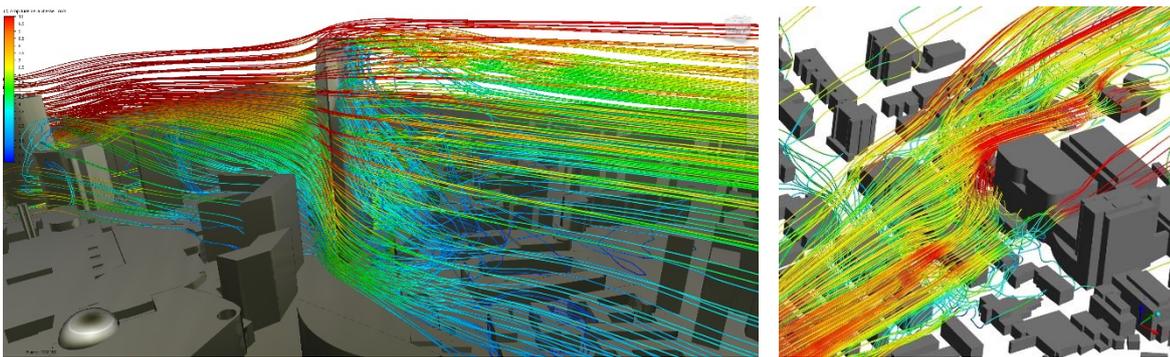
Construction: Lotte E & C

Scope of Services:

- Design
- Construction Administration
- Drafting Services
- Thermal Simulation Modeling Services
- LEED® Accredited Professionals
- Field testing Services
- CFD Analysis

CFD Analysis

Summit Façade can perform internal and external Computational Fluid Dynamics (CFD) analyses to check air pressure, velocity and temperature (internal) distribution inside the building areas or along the building perimeter. At a selected slice selection frame, contour bands and vectors can be plotted to visualize the selected parameter variation or flow



Site observation Services

Summit Façade performs site observations during construction as a quality assurance measure.

- Attends preconstruction Coordination Meetings with building enclosure subcontractors prior to start of building envelope installation.
- Observes installation of building enclosure systems, and prepare detailed reports addressing conformance with the Architect's design intent, Subcontractor submittals, and Manufacturer recommendations.
- Maintains an on-going list of deficiencies.
- Provides field testing services, or witness testing provided by others, and prepare detailed photographic reports documenting test protocol and test results.



LEED® Accredited Professionals

Thermal Stress Analysis

- Glass
- Stone
- Framing
- Sealant Joints

Window 6 / Therm 6 Software

- Overall Thermal Transmittance (U Factor) per NFRC 100 Procedures
- Overall Solar Heat Gain Coefficient (SHGC) per NFRC 200 Procedures
- Overall Visible Transmittance (VT) per NFRC 200 Procedures
- Simulated Condensation Resistance Factor (CRF) per AAMA 1503 Procedures
- Simulated Condensation Resistance Values (CR) per NFRC 500 Procedures
- Dew Point Analysis
- Predict reduction in whole building energy use due to façade renovations

WUFI Software

- Calculates moisture movement within opaque wall assemblies
- Analyzes proper vapor barrier type and location
- Predicts the probability of germination of mold spores

ANSYS FLUENT Software

- Combines heat transfer and fluid flow in a powerful 3-D simulation package
- Advanced computational methods for solving a wide variety of convection and radiation problems.

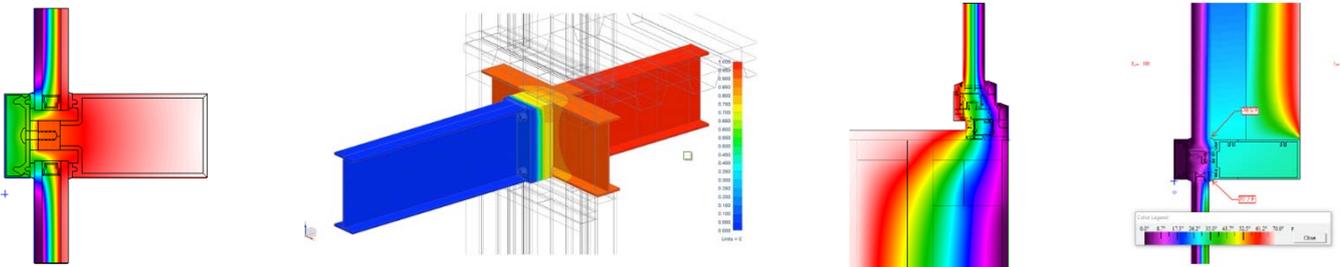


Thermal Simulation Modeling Services

Summit Façade offers thermal modeling and analysis services to building facade system manufacturers and subcontractors during system design development and technical submission phases. We also offer these services to Architects and Construction Managers to define design parameters during project documentation phases, for LEED® certification purposes or to diagnose condensation/frost formation after facade system installation. In addition to providing basic thermal services using Therm and Window, Summit Façade CDC can provide more advanced analyses using the ANSYS family of software packages.

Summit Façade will perform: Computer Thermal Simulation, via

- Window 6 Center of Glass
- Therm 6 Frame and Glazing
- WUFI Pro 4 Vapor Transmission

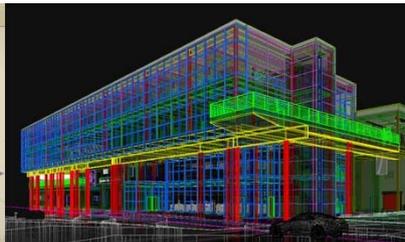
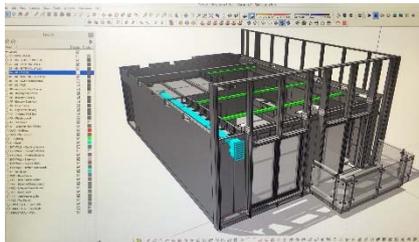


Drafting Services

Summit Façade is on the forefront of building facade engineering application of BIM software, allowing our Clients to comply with current project BIM requirements. Summit Façade's application of BIM includes clash detection between facade elements and surrounding construction, and overall coordination between the structure and other trades. We can also translate the 3D facade system detailing into part fabrication drawings for manufacturing applications.

Summit Façade utilizes the following software for 3D services:

- AutoCad 3D
- Revit Architecture
- Revit Structure
- Inventor





Mun Yeob Kim; Principal

In more than decade of service in the curtain wall industry, Summit Façade has advanced to become a total provider, the leading curtain wall consultant in Korea. It was founded in Seoul in 2001 by Mun Yeob Kim. Soon after, the company worked on a number of high-profile assignments like the World Trade Center (Seoul), Incheon International Airport (Incheon), La Guardia Airport(New York), Yangon Myanmar Grand Hotel (Yangon) and Respublika Plaza (Astana). Through the years, it has established partnerships with the world's top architects and owners and has played a vital role in the development of curtain wall systems for various celebrated landmarks around the world.

In 2018, Summit Façade expanded into the Luxury brand flagship market. Noteworthy projects include the Chanel, Van Cleef & Arpels and Hermes'. Our expertise is borne from more than decade of design and practical experience in façade consultancy. Summit Façade adopts the proactive approach. We formulate viable solutions, addressing concerns and coordinating closely with clients even before the design evolves too far

The design team operates on state-of-the-art software for accurate results in drawings and reviews. Regular training and research keeps us abreast with the latest design trends, design engineering, and technical management of cladding and wall systems. At Summit Façade, we bring together the best minds and hands that are well-versed in all aspects of the façade consultancy business.

OUR CLIENTS

SAMSUNG ELECTRONIC
HYUNDAI / KIA MOTORS
HYUNDAI E & C
DAEWOO E & C
POSCO E & C
LOTTE E & C
SK E & C
GS E & C
LOTTE HOTEL & RESORT
WALKERHILL HOTEL & RESORT
HAEUNDAE BEACH GOLF & RESORT
GRAND SHERATION
PARADISE CASINO
FOUR SEASONS
ACRO SEOUL FOREST
Van Cleef & Arpels
CHANEL
HERME'S
NAVER Corp.
I' PARK
M.B.C.
L.H. Corp.
KEPCO; KPS
M.D.C.
ORACAL
THE MVL KINTEX
AMORE PACIFIC CORP
EWHA WOMANS UNIVERSITY
MINISTRY OF OCEANS & FISHERIES
INCHEON INT' AIREPORT
HANA BANK
BANK OF KOREA
KOREA DEVELOPMENT BANK

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CallisonRTKL
COUTAINWALL DESIGN CONSULTING
ALT International facade consultant
Eclipses + Will Ltd.
DPJ & Partners
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