LONG ON PRODUCTIVITY.
SHORT ON LEARNING CURVE.

HAP v6

Building load calculation and
energy modeling software

CARRIER MALAYSIA

For over 30 years, Carrier HAP has remained one of the most popular, user-friendly building load calculation and energy modeling programs in the HVAC industry. HAP is now becoming an even more powerful design and analysis tool, with revolutionary new features and major enhancements of existing ones.

WORK FASTER WITH POWERFUL NEW FEATURES

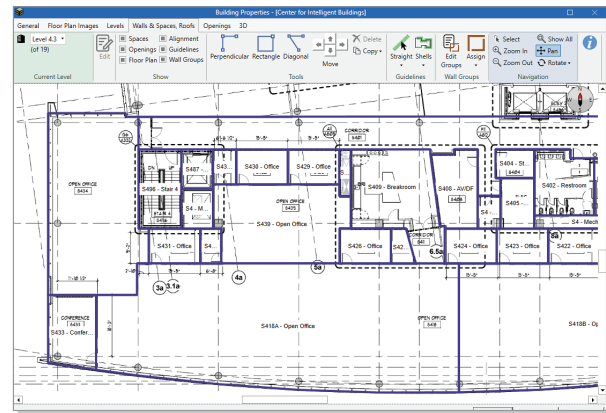## New 3D Building Modeling Workflow

- Quickly import, scale, and orient architectural floor plan images

- Define multiple building levels (floors)

- Use powerful new **sketch-over** tools to define space boundaries

- Automatically calculate floor, wall, roof, window, and door areas from sketch-over; no more take-offs or tabular area inputs

- **Smart** sketch-over tool automatically aligns walls properly

- **Drag and drop** window and door openings into the floor plan

- **Analyze shading effects** from building self-shading

- Adjust position of walls when architectural plans change

- **Automatically create 3D rendering** from 2D sketch-over for visualization and checking

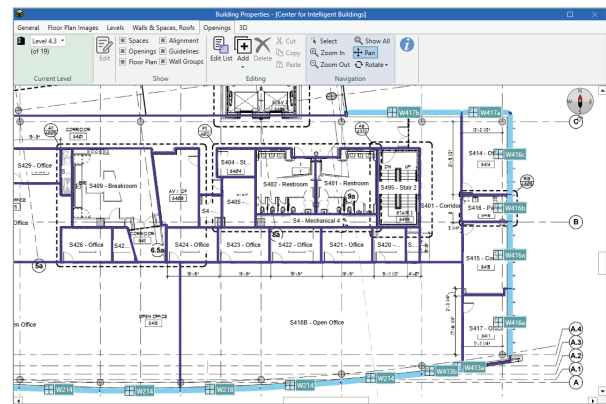## Space Type Defaulting for New Projects

- Use built-in default space types based on a chosen building type (Office, Education, Healthcare, Hotel, Retail, etc.)

- Automatically populate space types with ASHRAE Standard 62.1 ventilation requirements and Standard 90.1 lighting power density requirements
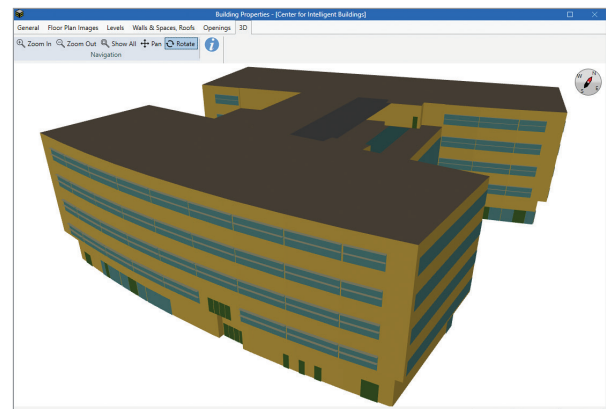
New Weather Wizard for Climate Data Selection

- Visually select weather from library of **7,400 weather stations** worldwide

- Selected station determines ASHRAE 90.1 climate zone, which automatically populates project with **90.1-compliant construction assemblies** (walls, roofs, floors, windows, doors)

Sketch-Over Space Boundaries

Drag-and-Drop Window Openings

3D Rendering for Visualization

Features for Efficient Space Data Input

- Enter space data rapidly and efficiently via a **grid (spreadsheet-style interface)** which shows data for all spaces side by side
- Use **space types** to rapidly default data
- Use **copy and paste features** to quickly customize data
- Export and import space data to and from spreadsheets

Daylighting Analysis

- Evaluate energy savings of **automatic daylighting controls**
- Model side-lighting, stacked side-lighting, clerestory windows, and skylights
- Model continuous or stepped dimming controls

Other Revolutionary Features

- Integration with US DOE **EnergyPlus™** simulation engine
- Uses ASHRAE **Heat Balance** load calculation method

Grid-style interface for space data input
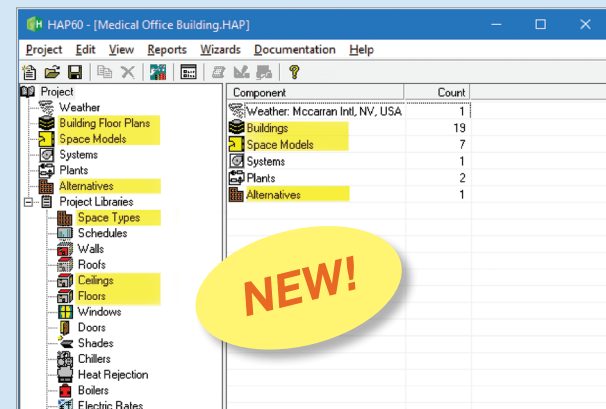

Model automatic daylighting controls

GET UP TO SPEED
IN A FAMILIAR INTERFACE
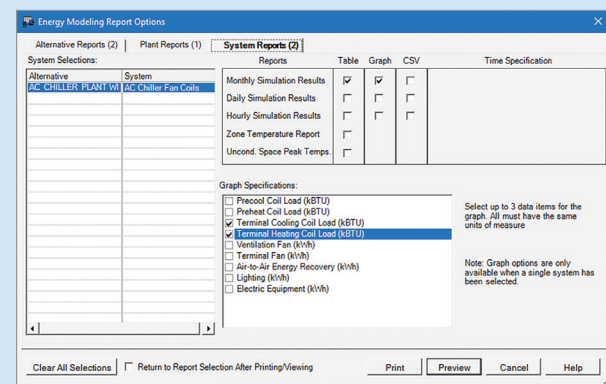
Become Productive with HAP v6 Quickly

- HAP v6 retains the **familiar look and feel** of HAP v5 so you can leverage your existing experience to quickly become productive
- This results in an **easy learning curve** to become proficient
- Quickly take advantage of new **productivity-enhancing features** to save time and money
- **No lengthy interruptions to retrain staff** on a new and unfamiliar modeling tool
- **Import your custom library items from existing HAP v5 projects** to save time in project setup—includes wall, roof, window, door assemblies, shading, schedules, chillers, heat rejection, boilers, utility rates

Enhanced Reports

- Select multiple categories of reports all at one time for easy batching of System, Plant, and Alternative reports
- New Heat Balance Summary reports
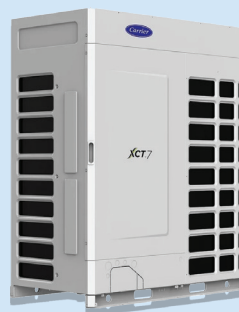- New Unconditioned Space Summary report

A familiar look and feel

Now even more powerful and efficient

New and Enhanced Airside Modeling

- **Unlimited number of HVAC zones** per air system.
- Rooftops: Detailed multiple-stage compression models, 1-, 2-, 3-speed fans.
- VAV: Dual maximum VAV/RH terminal controls.
- VRF: Updated part-load models.
- Hydronic FCUs: 1-, 2-, 3-speed fans.
- WSHP/GSHP: Updated part-load models, 2-stage compression models, variable-speed pumping for WSHP loops.
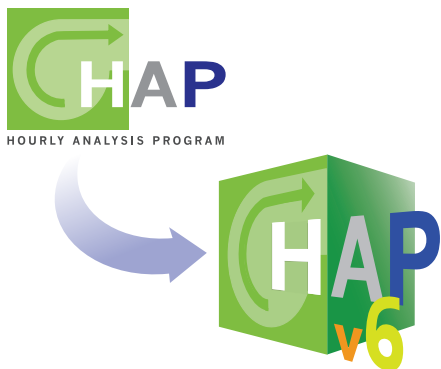- DOAS: Ventilation air direct-to-space and direct-to-terminal inlet options for effective modeling of decoupled ventilation load—plus additional DOAS cooling sources.
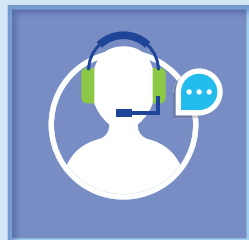
Improved Project Management

- Each project stored as a **single .hap file**
- Save .hap files anywhere—including shared or network drives for collaborative design—without needing to install HAP on a network

New Air Handling Unit modeling features

New VRF system modeling features

The Industry's Best Value. At No Extra Charge.

HAP
HOURLY ANALYSIS PROGRAM

HAP v6

- **Free upgrade** to HAP v6 for existing HAP licensees
- **Competitively-priced licensing** for new customers
- **No per-seat charges**—one license covers 10 concurrent users
- **No network license** required

Upgrade on Your Schedule. Not Ours.

- License holders in Malaysia can continue using HAP v5.1, even after receiving their free HAP v6 upgrade
- No planned phaseout for legacy HAP v5.1
- Migrate to HAP v6 at your own pace
- Enjoy full technical support for both legacy and new HAP versions from the business development team

For more information on HAP v6, please visit **www.carrier.com.my**

Carrier