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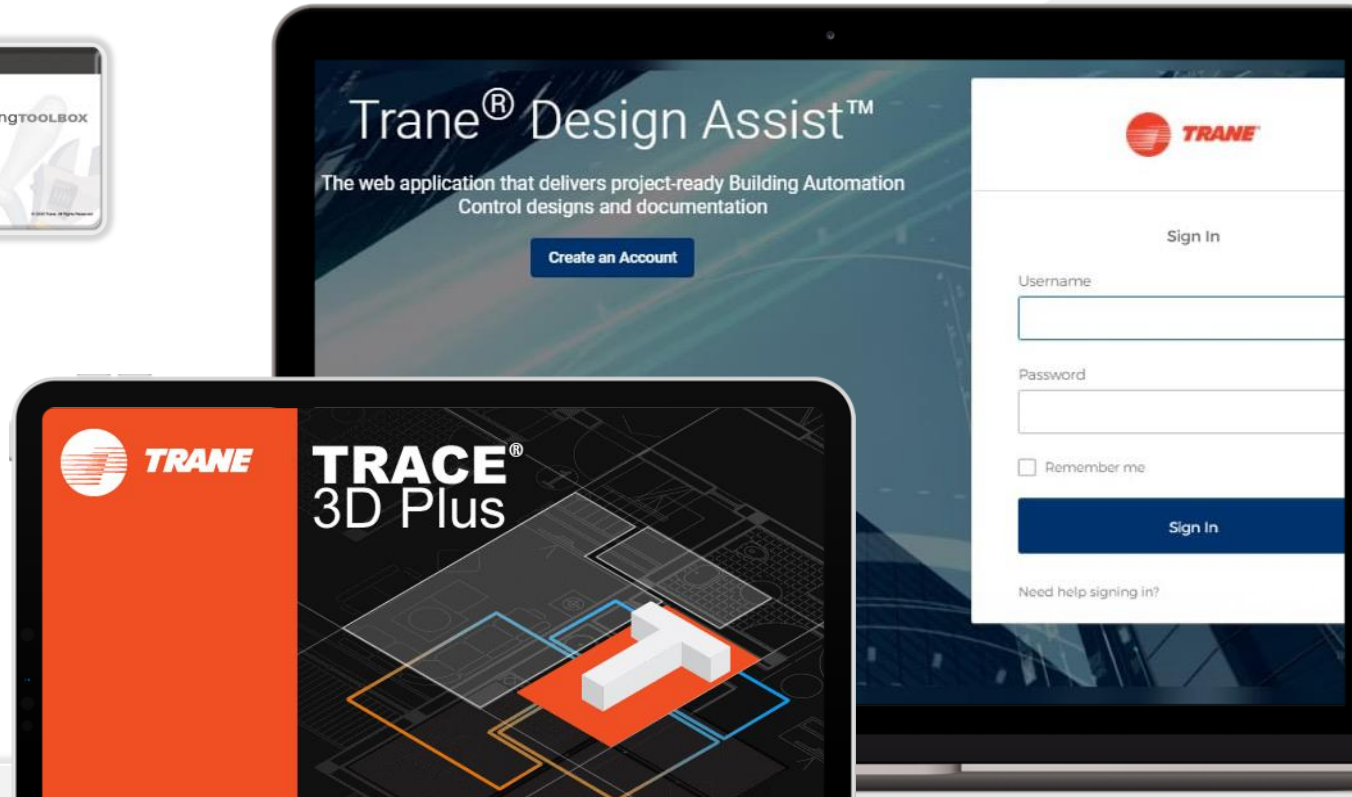
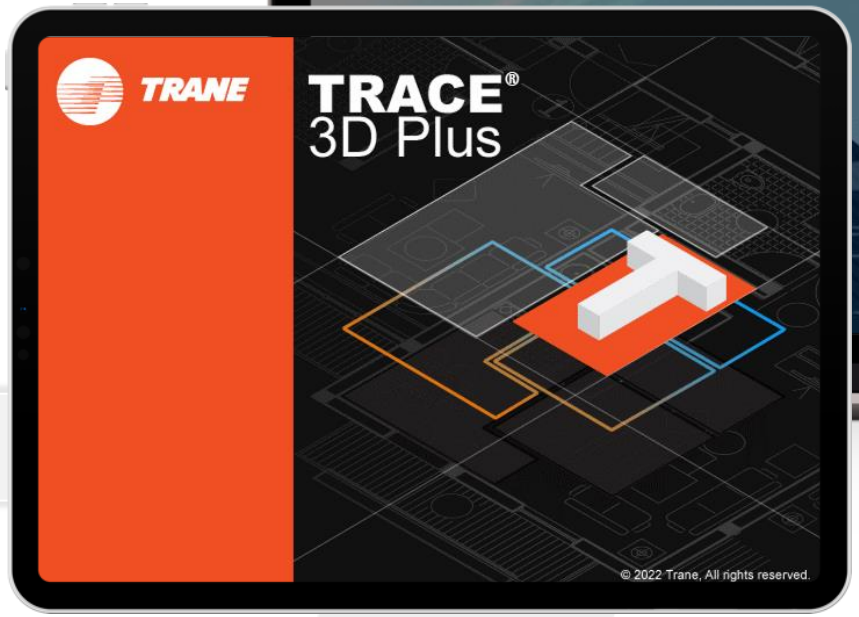
TOGETHER//
2022 Partner Exchange
Technology Talk
TRACE® 3D Plus and Trane® Design Assist™
9/20/2022
TRANE
TRANE
TECHNOLOGIES

# Trane is here to help!

For more than 50 years Trane has been developing software to help design, build and maintain better buildings.




**Today we will be focusing on two…**

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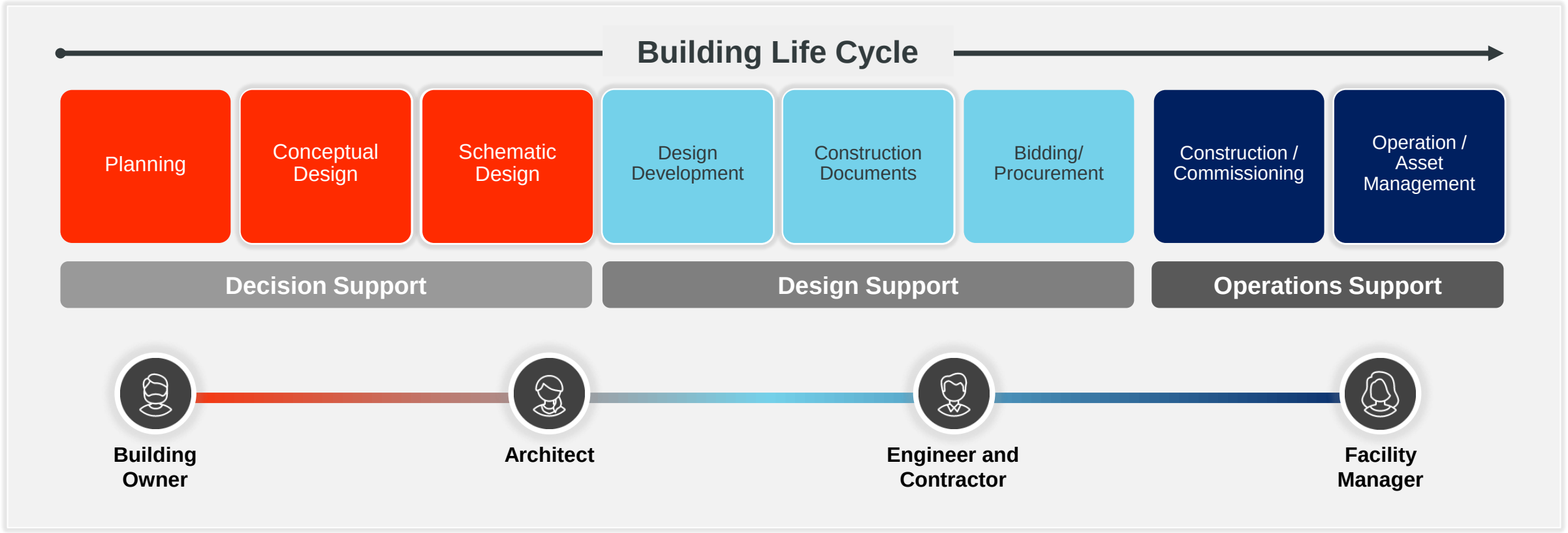
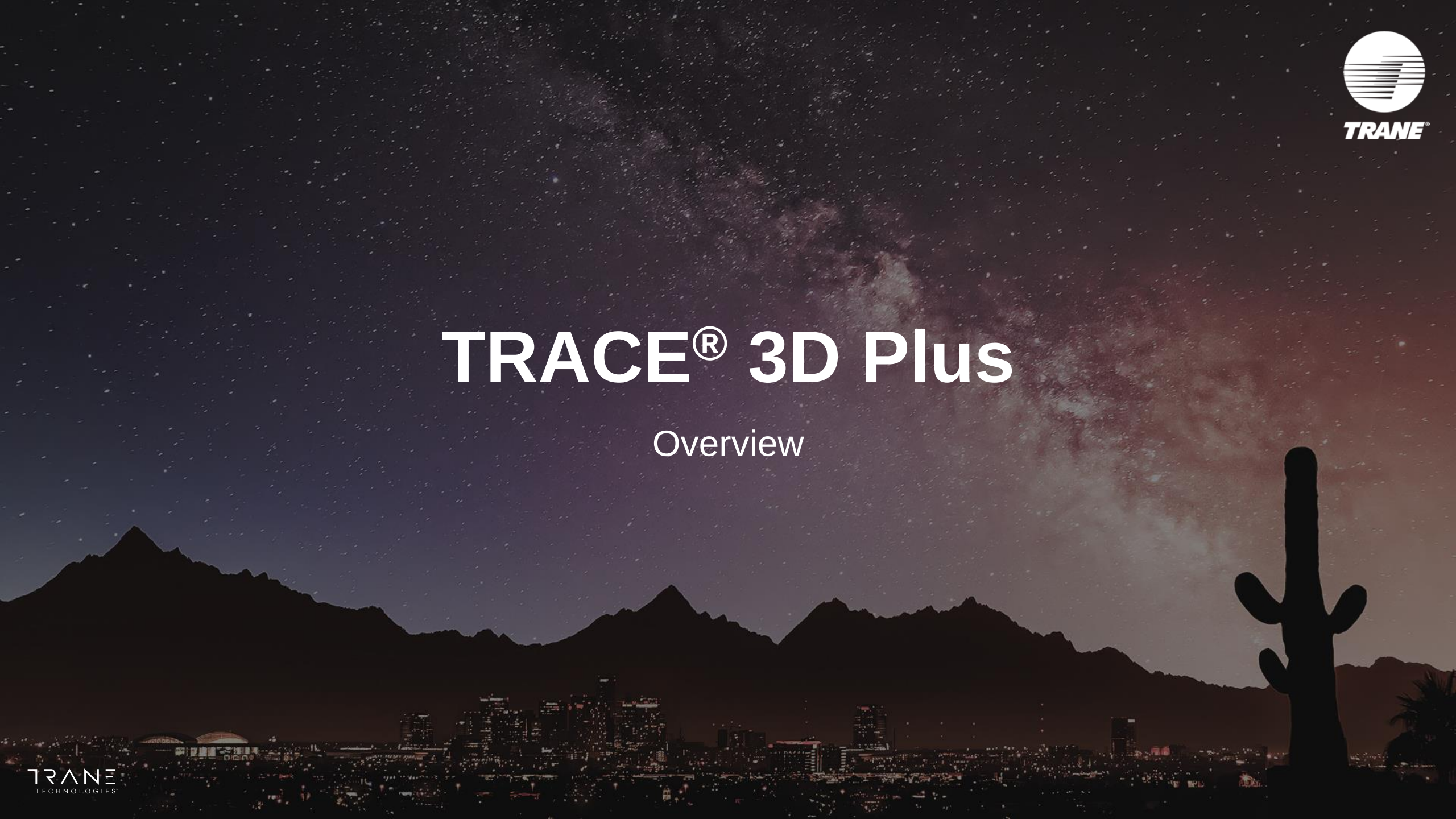
# Trane tools improve productivity!

TRACE® 3D Plus and Trane Design Assist can help within multiple stages of the building life cycle!



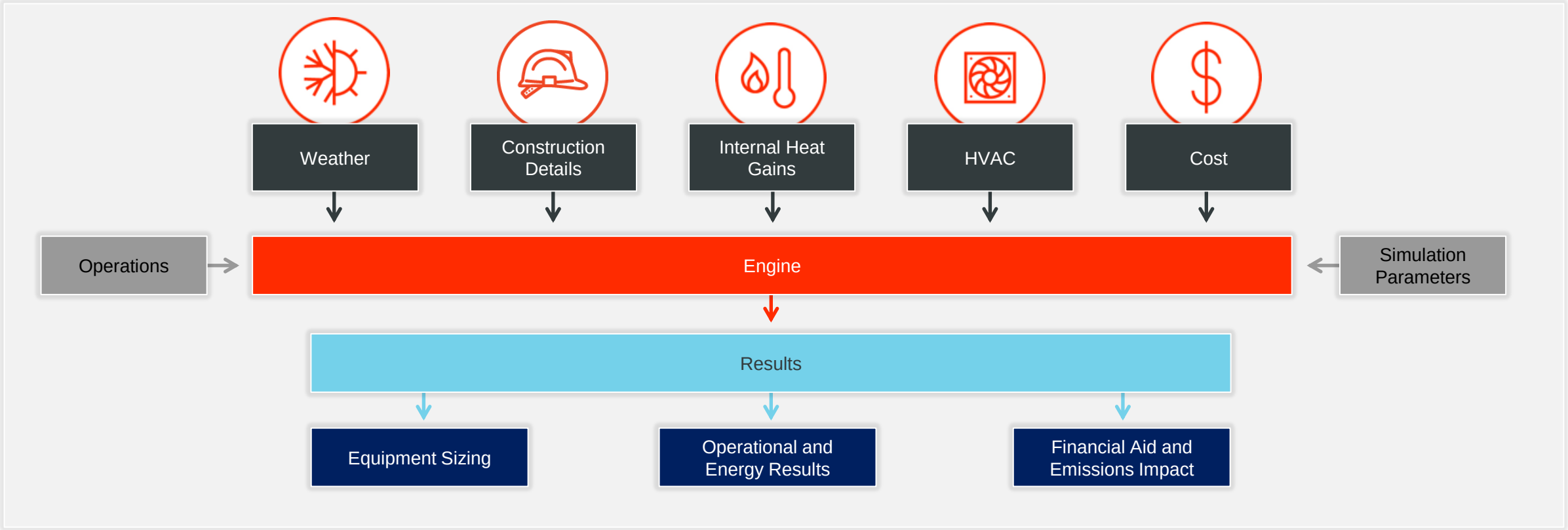


# TRACE® 3D Plus

Overview

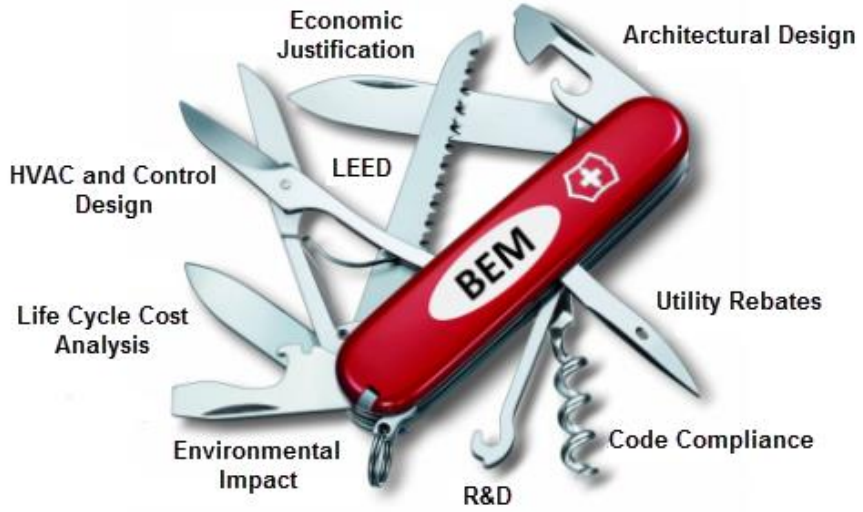
# What is TRACE® 3D Plus?

- **TR**ane **A**ir **C**onditioning **E**conomics
- Virtual physics-based replica of a building using EnergyPlus
- Subscription based platform including support



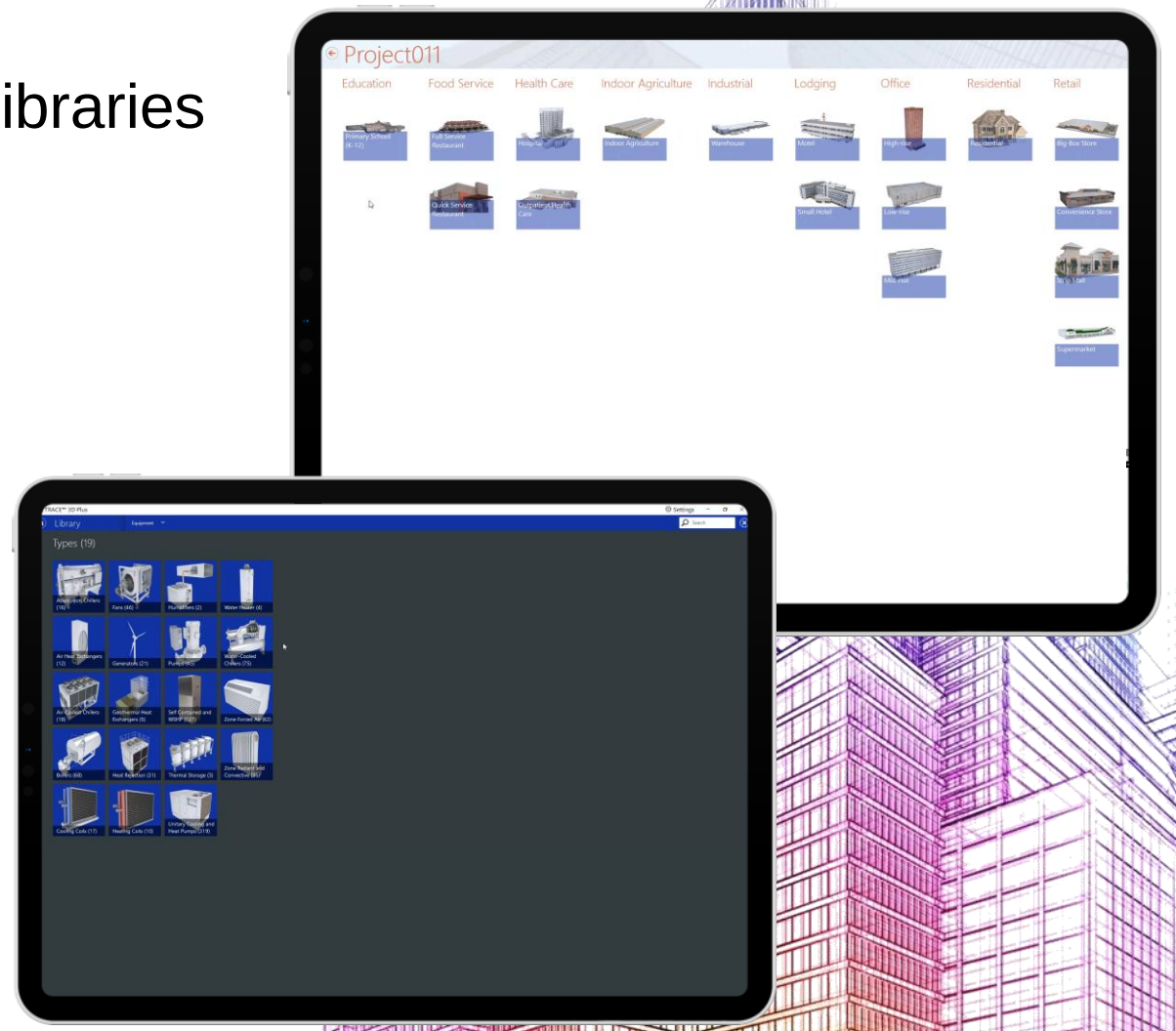
# Where Can TRACE® 3D Plus Help?

- Quick early/conceptual stage analysis
- Accurate equipment sizing
- Code compliance or building ratings
- Energy, life cycle cost, or utility optimization/rebates
- Carbon footprint, emissions, and renewal energy analysis
- Monetization of retrofit/renovations



# Conceptual or Schematic Design – Efficiency

- Pre-configured building themes
- Thousands of pre-loaded and scalable libraries
- Simple, quick building wizard
- Industry standard defaults
- Built-in intelligence and validation
- Quickly compare up to 20 alternatives
- Great for “ballpark” EUI or utility costs

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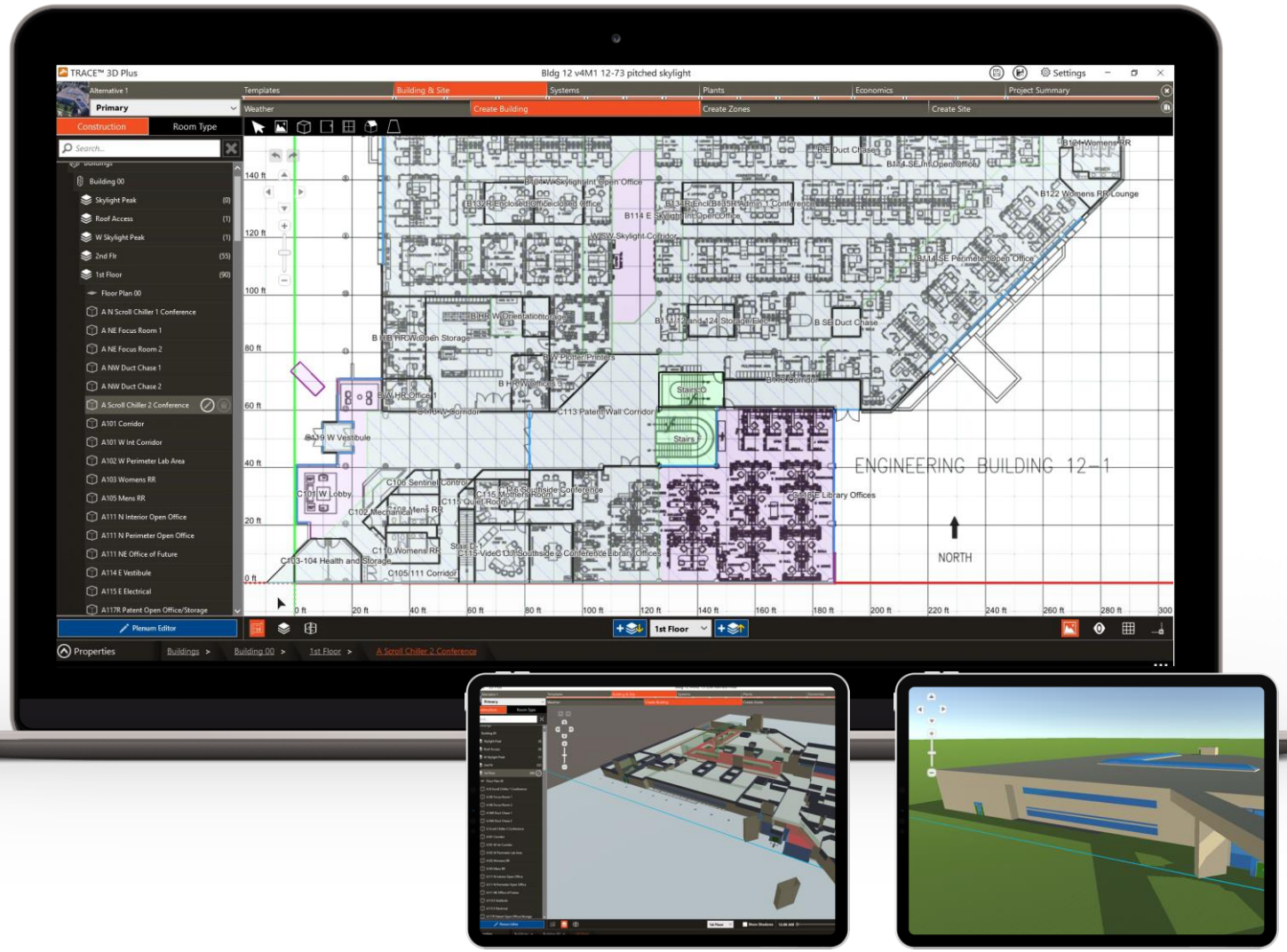
# Design Development - Scalability




- Import or trace over building geometry
- Seamless load design integration
- Customize building themes, templates and libraries
- Quickly apply mass model changes
- Compare up to 20 alternatives
- Simulate alternatives simultaneously using the cloud

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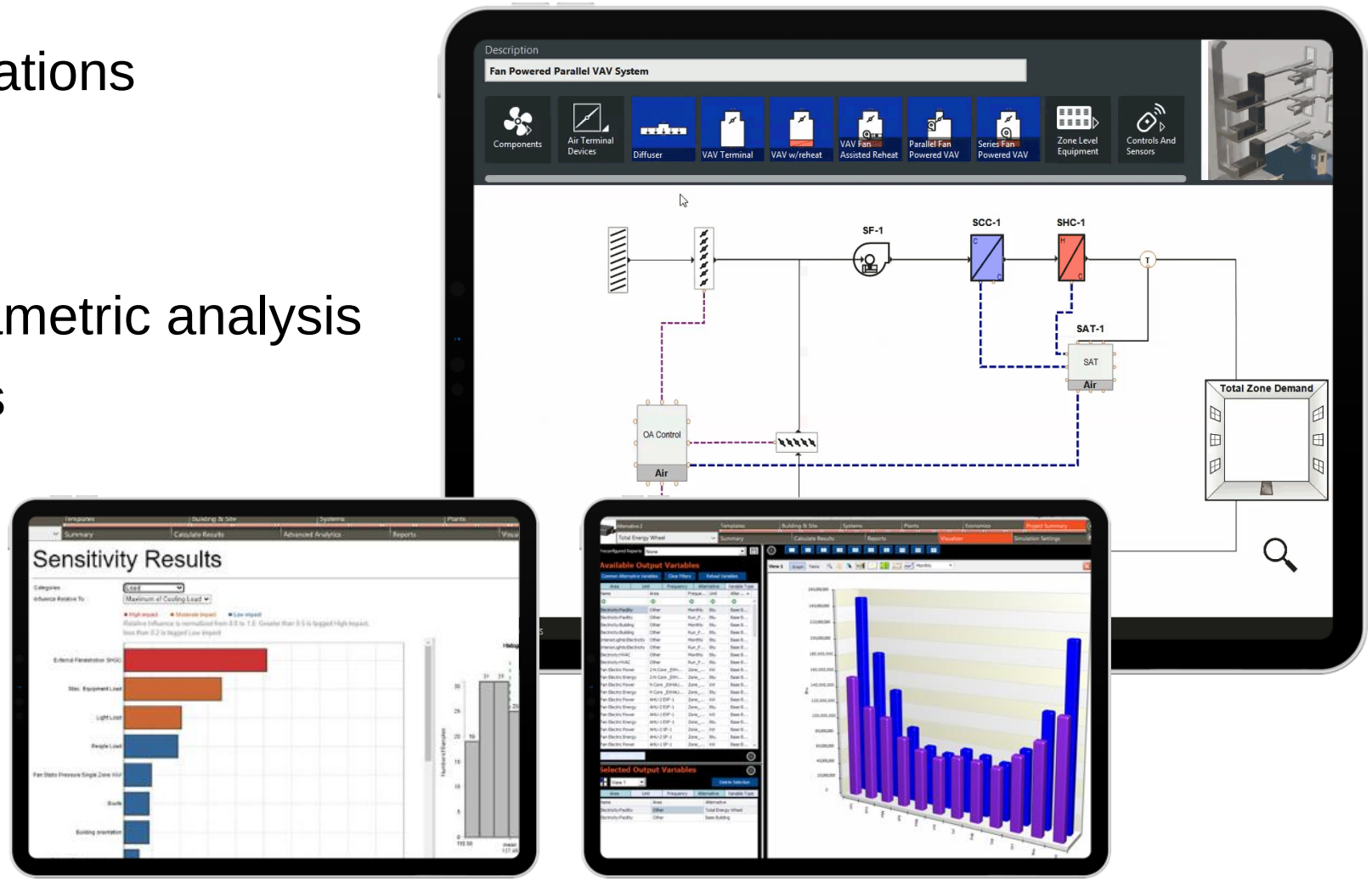
# Design Development - Productivity

- Schematic configurations
- Guided wizards
- Built-in intelligence
- Sensitivity and parametric analysis
- Graphic rich reports
- Data visualization



# What's new in TRACE® 3D Plus!

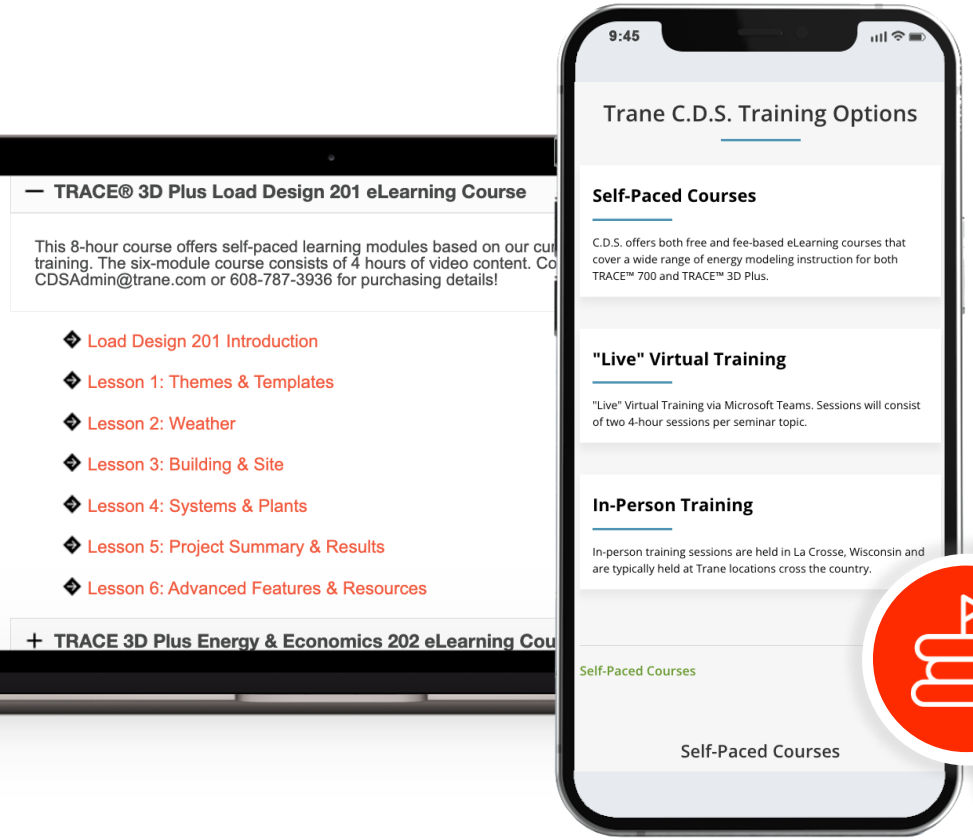
- Improved simulation speed
- Auto-sizing of cooling supply air temperature
- Central W/GSHPs
- Expanded undo/redo
- Expanded checksums reports
- Zoom to room
- Improvements to load design reports and gbXML import

# What's coming soon?

- ASHRAE® 170 support
- New Load/Airflows report
- Spreadsheet capabilities
- Title 24 and ASHRAE® 90.1-2019 libraries
- Latent sizing options
- Improved air transfer model
- Export to LightStanza (Daylighting)
- Expanded heat recovery features
- Improved performance
- Silent installation option

**And more!**

# Training and Support Options



Standard curriculum with **flexible options**

- Load Design
- Energy and Economics

Active subscriptions include **world-class support**

- E-mail
- Phone with screen sharing
- Comprehensive web-based knowledge center
- Engineers with years of industry experience

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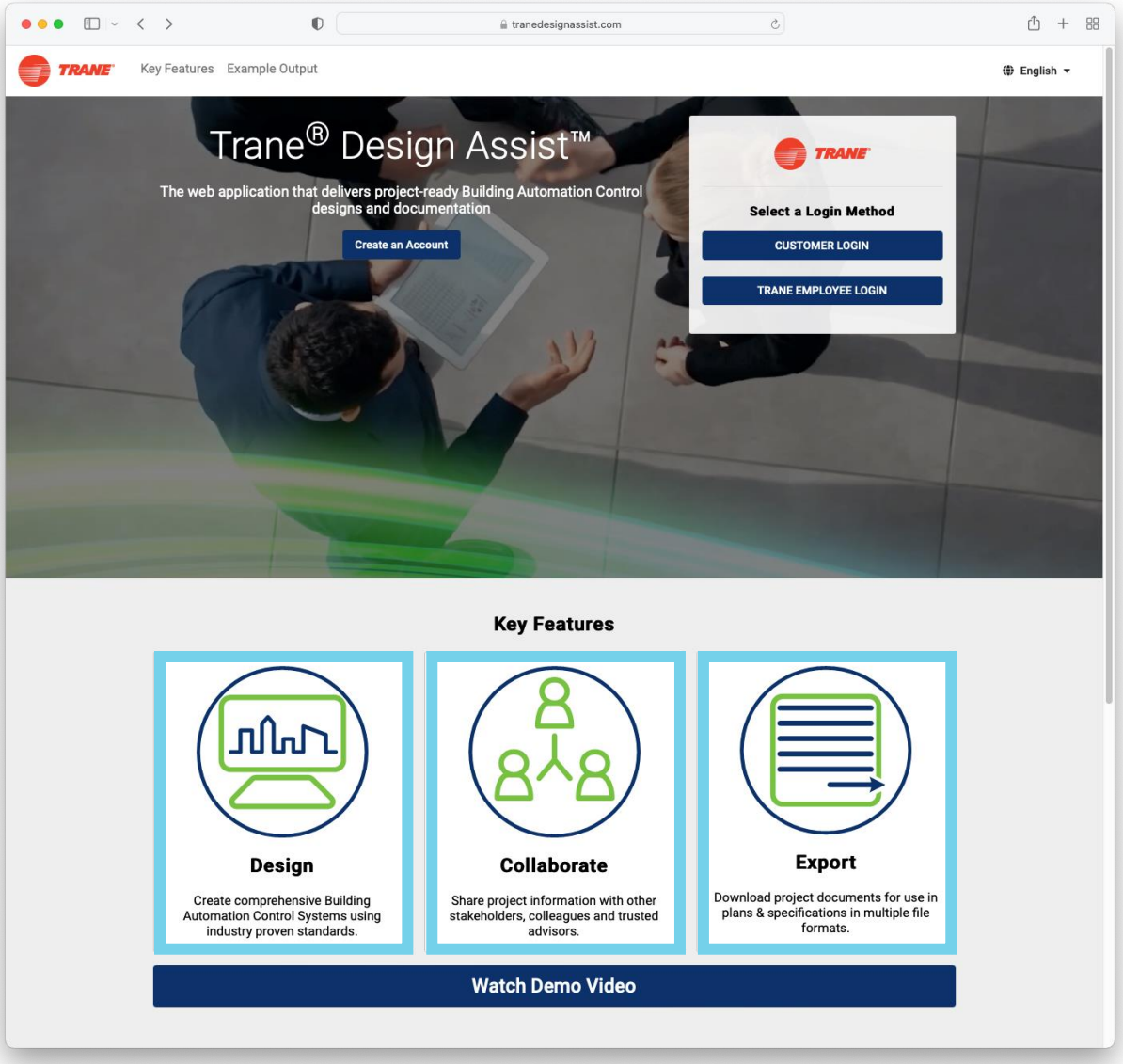
# Trane® Design Assist™

Overview

# What is Trane® Design Assist™?

- Project designs and documentation for Building Automation Systems
- Web-based resource
- Manufacturer agnostic designs
- Complimentary, no licenses or fees

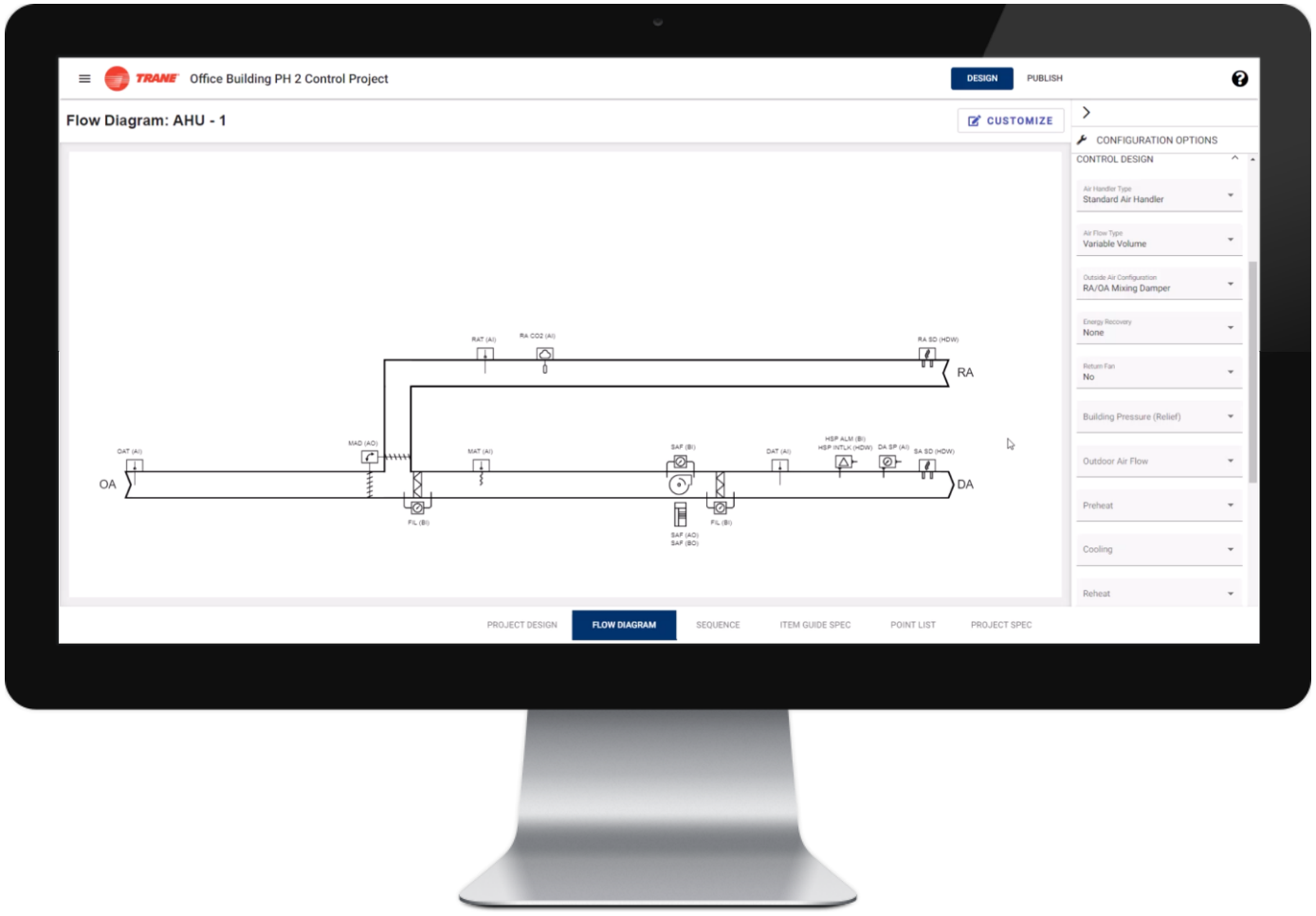


# Where Can Trane® Design Assist™ Help?

- Streamlined workflow
- Jumpstart design efficiencies
- Industry standards and proven / leading strategies
- Self-service access to:
  - Project Layouts
  - Flow Diagrams
  - Sequence of Operations
  - Points List
  - Project Guide Specifications

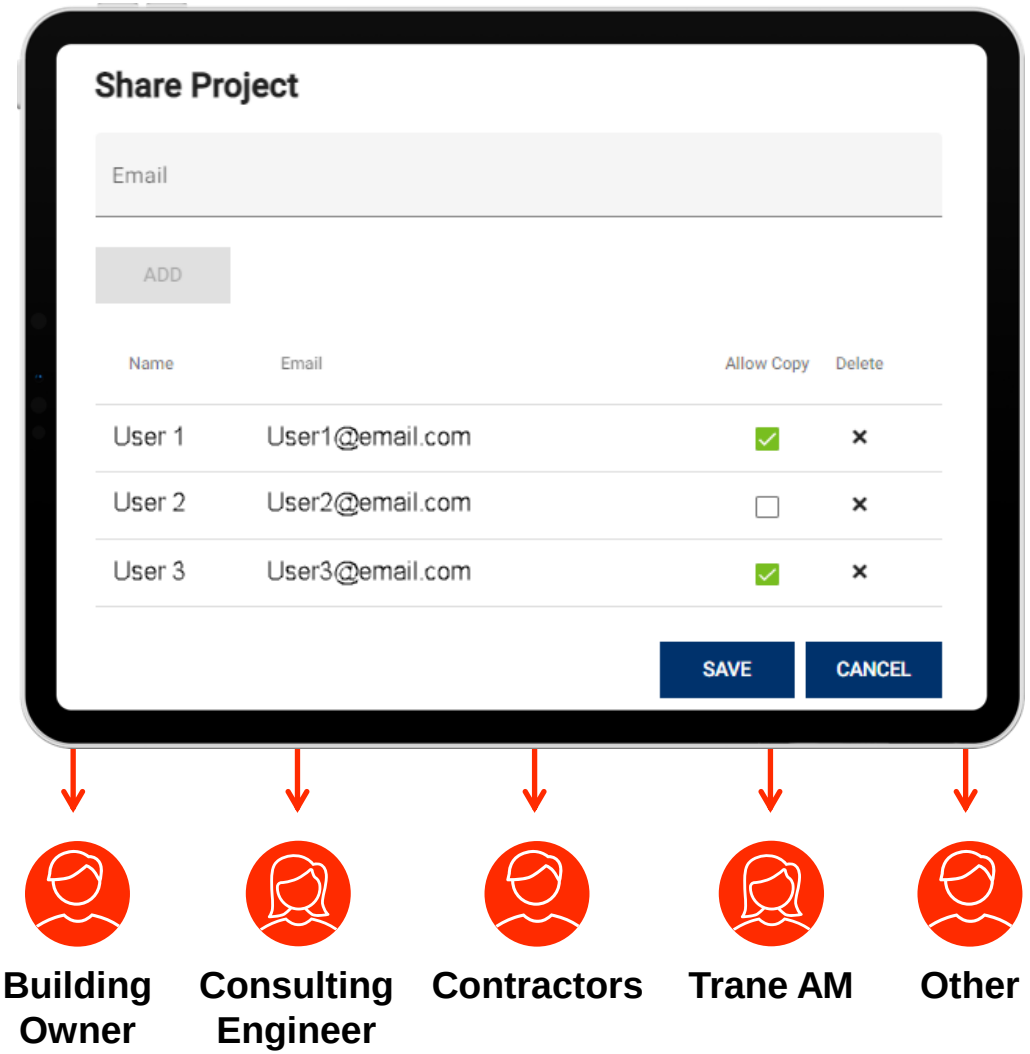
# Schematic & Design Development – Reliability

- Build scalable project designs faster
- Consistencies within using Systems approach
- Flexibility in configuration options
- Customization features
- Saves times and prevents omissions



# Design Development – Collaboration

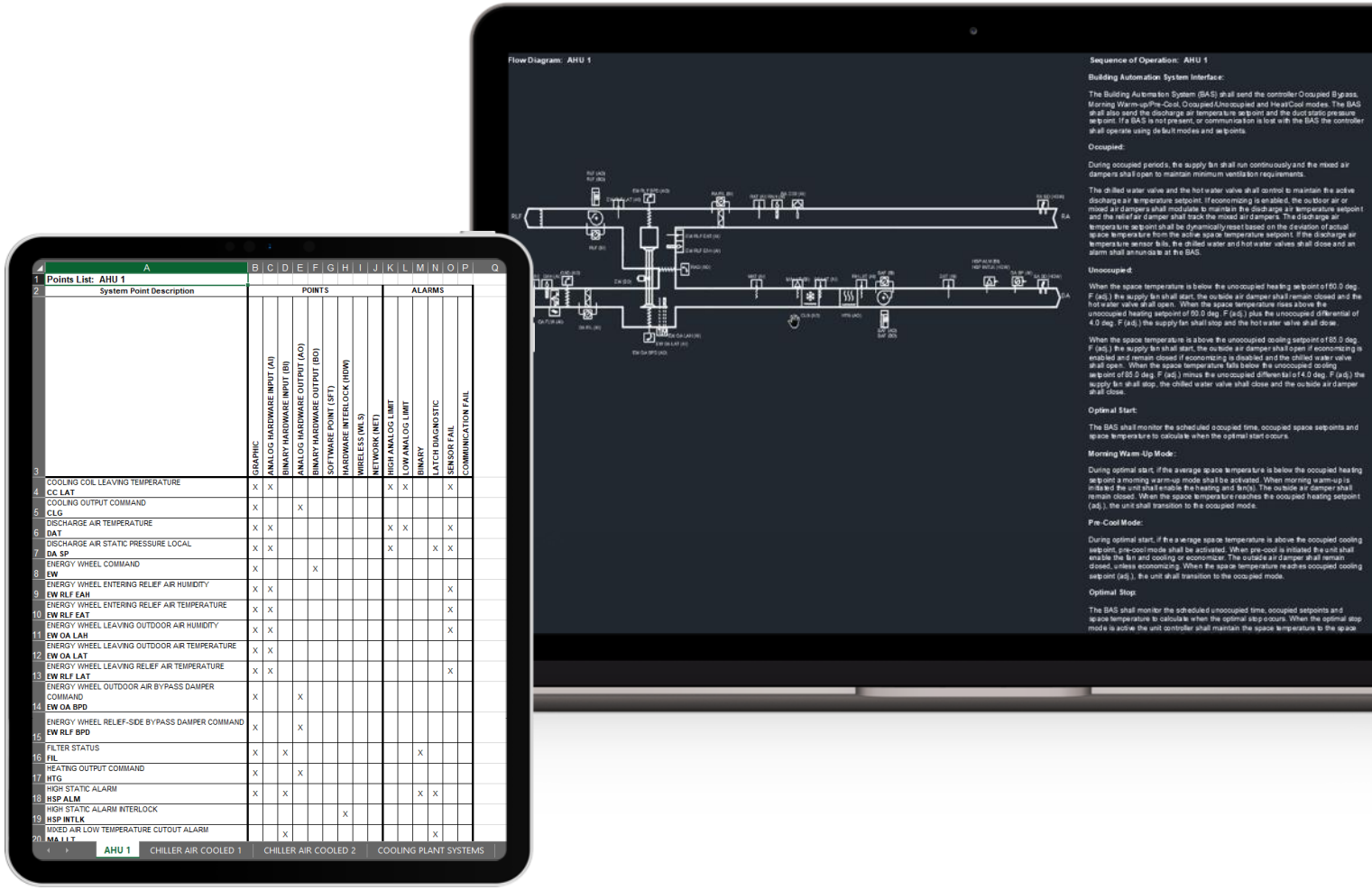
- Share projects with other stakeholders, colleagues and trusted advisors
- Enhance productivity through increased communication
- Network sharing with other subject matter experts
- Faster problem solving and decision making
- Overall project delivery is accelerated



# Construction Documents – Accessibility

- Synchronized drawings and specifications
- Consistent and professional formats
- Expedited delivery of construction ready documents
- Supported file types:

DWG PDF DOCx XLSX



# So what's new in Trane® Design Assist™?

Multi Language Support
(Spanish, French Canadian and Portuguese)

Legend Key and Flow Shape Library additions

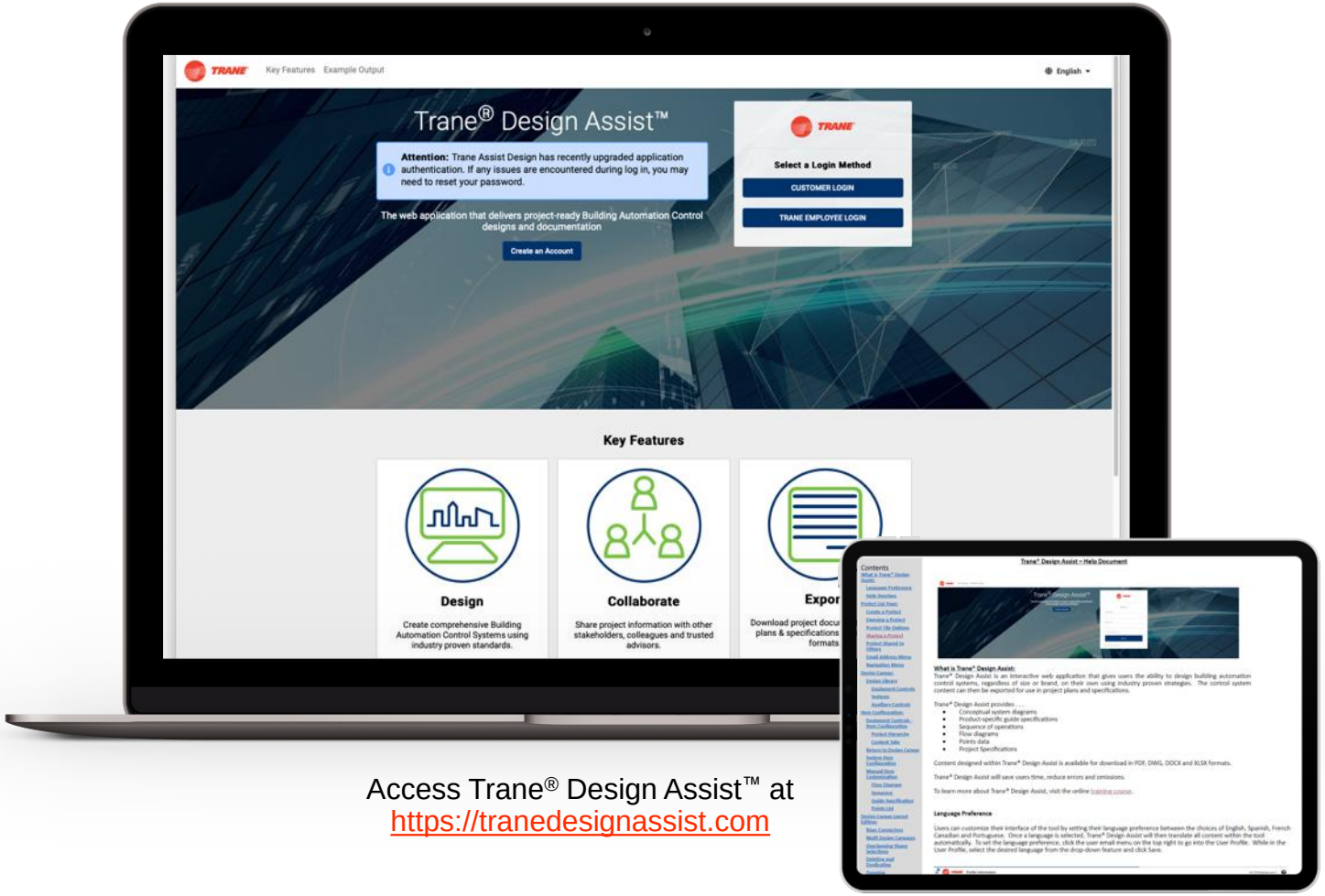
x2
"Typical for" item associations

System Design Library additions

Design Canvas Riser Layouts

Project Guide Specifications

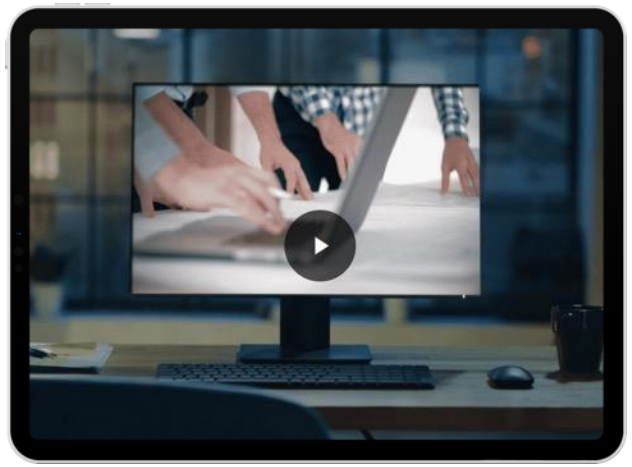
# Training and Support Options



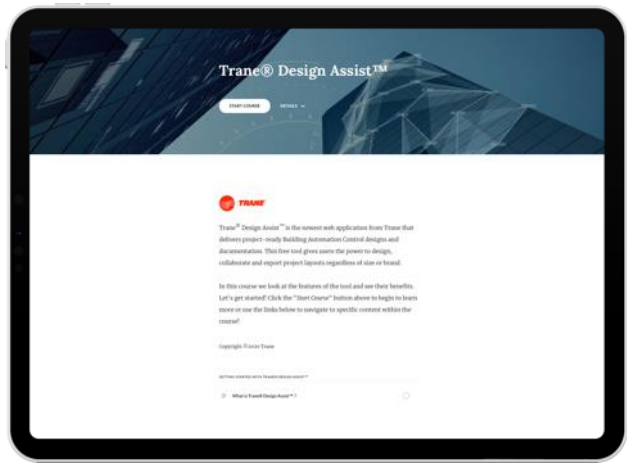

Access Trane® Design Assist™ at https://tranedesignassist.com



In Tool Help Document



Introducing Trane® Design Assist™ Video




Trane Design Assist Training Course

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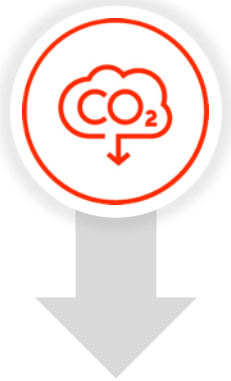
# What about current industry trends?

## Decarbonization of Buildings

### TRACE 3D Plus

- Analyze Impact of Renewables' Energy Contributions (PV, Wind etc.)
- Quantify and Compare Site or Source Emissions ($CO_2$, $NO_X$, $SO_2$, etc.)
- Compare Greenhouse Carbon Footprint/Equivalence
- Understand, Quantify, and Compare Source Energy Usage




**Electrification**
**Renewables**
**Energy Efficiency**
**Systems**

### Trane Design Assist

- Assemble Energy Efficient sequences of operations & overall control strategies
- Layout heating and heat recovery solutions
- Implement BAS Systems to help go all electric and avoid higher utility bills or equipment inefficiencies.
- Improve building sustainability through simple and convenient control

# Resources and Support

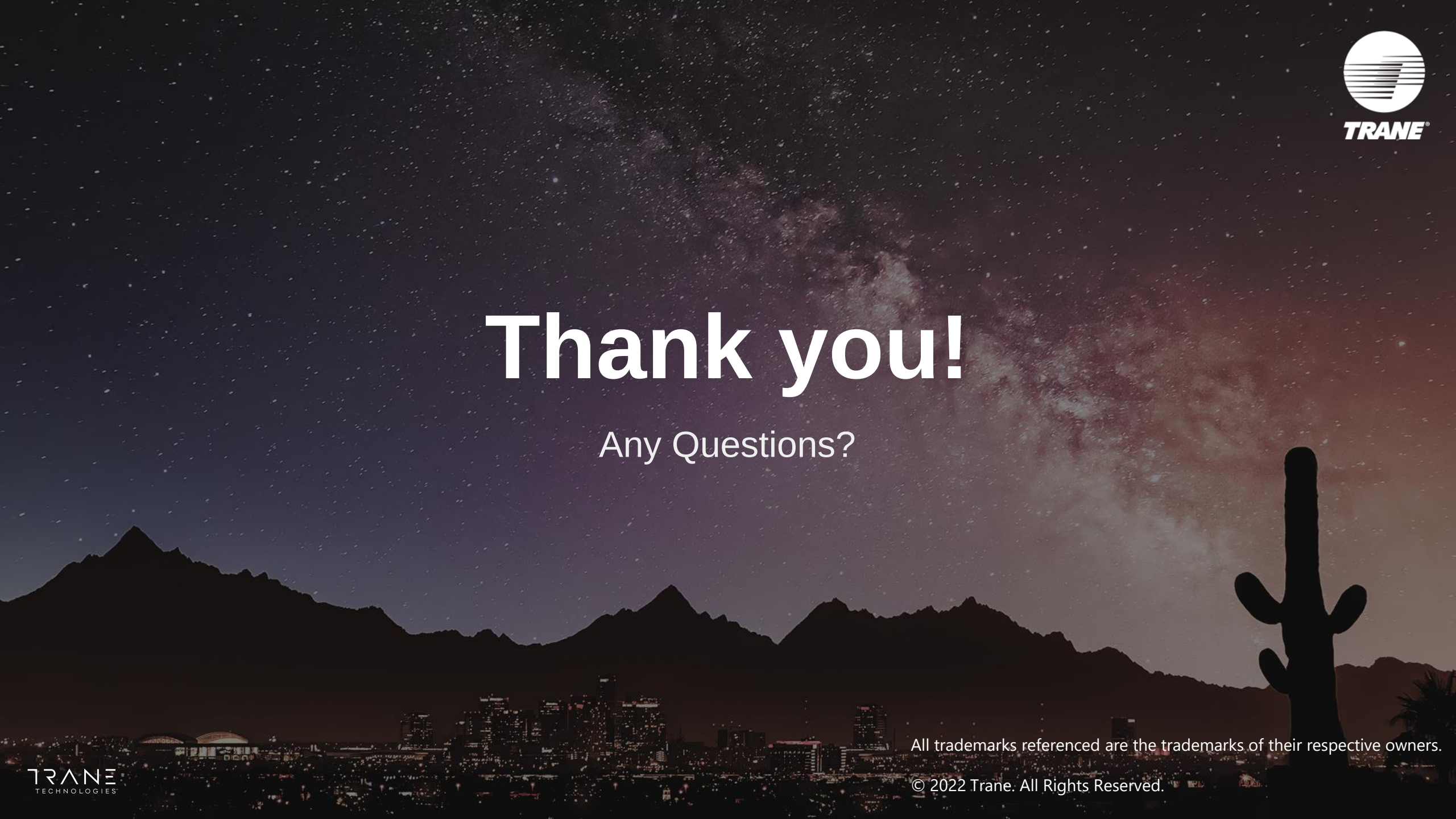
# Where can you learn more?

To learn more about our tools go to www.tranecds.com

Visit our e-commerce website at https://shop.trane.com

Contact via e-mail at cdsadmin@trane.com or tdasupport@trane.com

**or call us at 608-787-3936**




# Thank you!

Any Questions?

TRANE TECHNOLOGIES

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