

TRANE EXPERTISE



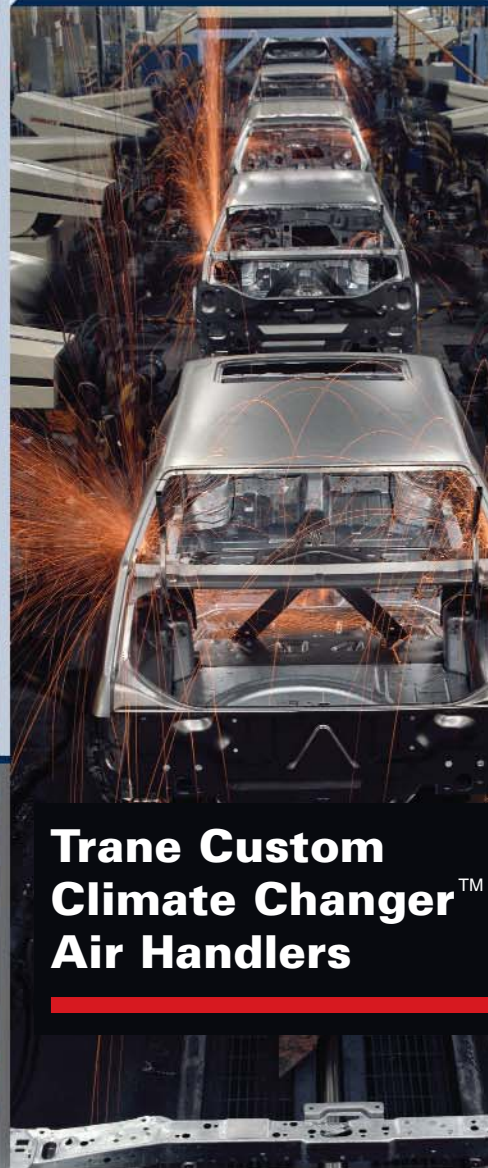
COMMITMENT



CRITICAL PERFORMANCE



VALUE



**Trane Custom  
Climate Changer™  
Air Handlers**

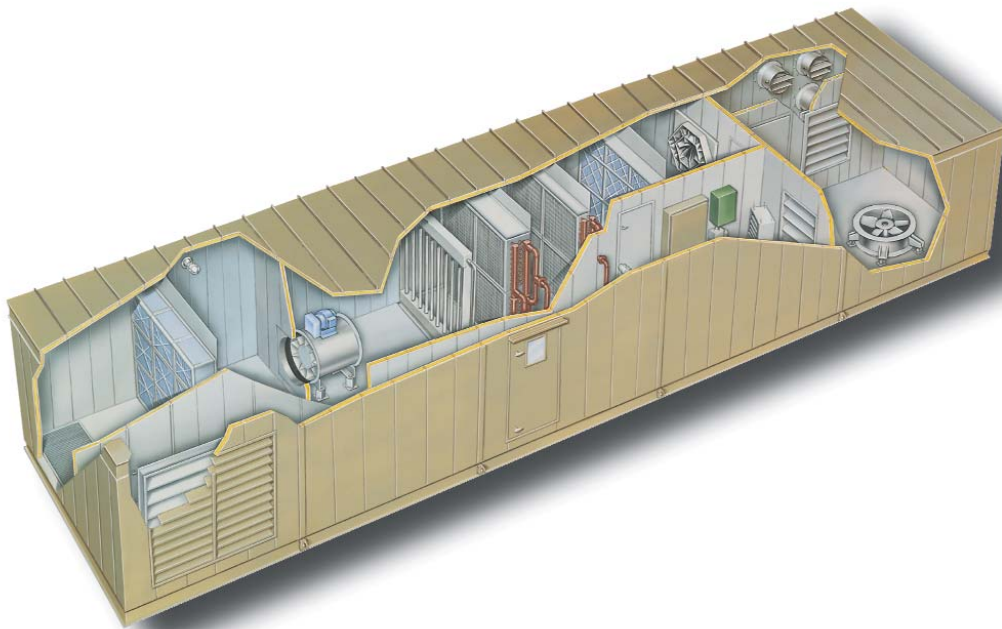


*It's Hard To Stop A Trane.®*



## Trane Custom Climate Changer™ Air Handlers

Air handlers are critical components in today's complex building systems. Trane engineers and manufactures air handlers for comfort and process applications that meet exacting standards in air quality, reliability, noise, environmental responsibility, and ease of installation and maintenance. Trane builds air handlers to satisfy the most challenging business needs.



### Trane Expertise

Trane has a reputation for engineering optimized solutions for complex needs. Our sales, application, design and manufacturing engineers have extensive experience in the custom arena, having provided unique solutions for everything from hospitals, universities and premium hotels to laboratories, museums, and pharmaceutical manufacturing facilities.

Whether for commercial, industrial, institutional or process applications, Trane can engineer a reliable, energy-efficient, environmentally responsible system, factory-tested and documented to perform predictably to critical customer specifications.

### Commitment

Early involvement, trust, and communication are key to successful custom air-handling projects. Trane Custom Climate Changer air handlers have been faithfully serving customers for over 35 years. Building on that experience and the expertise of your local Trane sales team, we will work with you to develop the optimal solution for your comfort and process needs.

### Critical Performance

While most of your HVAC challenges can be met with Trane's highly flexible cataloged air handlers, as

- more ventilation
- higher acoustical performance
- special materials
- better indoor air quality
- greater flexibility

stretch system requirements beyond cataloged capabilities, Trane continues to lead the way.

### Value

Rely on Trane for consistent quality, performance and service. Trane sales, applications, engineering, service and parts support worldwide confidently helps you reap the full potential of your investment. No matter where your next project may be – from down the street to across the globe – you can be confident that your Trane Custom Climate Changer™ air handler will be an incomparable value over the long-run.

# TRANE CUSTOM CLIMATE CHANGER<sup>TM</sup> AIR HANDLERS

## TRANE EXPERTISE



Trane engineers custom air handlers for your industrial, commercial, institutional and process applications.

## COMMITMENT



## CRITICAL PERFORMANCE



## VALUE

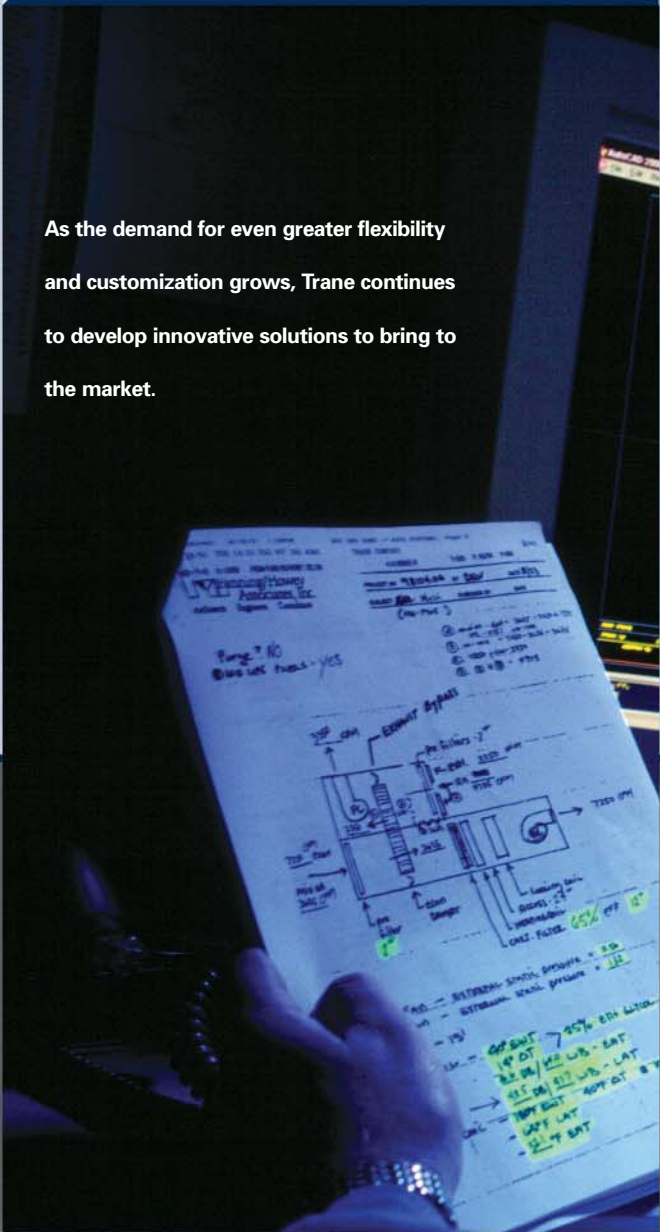


Industry Leadership

As the demand for even greater flexibility and customization grows, Trane continues to develop innovative solutions to bring to the market.

Technical Excellence

Shared Knowledge





## Industry Leadership

Trane is an industry pioneer. Many of the technical concepts used in the industry today were developed by Trane. This foundation, coupled with the substantial investments Trane has made in research, development, and engineering account for the Trane tradition and mark of excellence.

In 1989, Trane revolutionized the HVAC industry with the development of the Modular Climate Changer™ air handler. Using a “building block” approach to air handler design, Trane dramatically increased the flexibility of cataloged air handlers and systems.

As customer demand for even greater flexibility and customization grows, Trane continues to develop innovative solutions to bring to the market.

## Technical Excellence

Trane global engineering is renowned for reliable, high quality, environmentally responsible designs. Critical performance applications require confidence in your custom air-handling system. Trane experts provide testing, tools, and data to give precise and predictable per-

formance. Trane engineered solutions tailored to your specific performance requirements include:

- Energy recovery
- Dehumidification
- Energy efficiency
- Demanding high static applications

## Shared Knowledge

Trane sales engineers are the most highly trained in the HVAC industry. Graduate-level engineers have completed an intensive six-month post-graduate training program encompassing HVAC systems design and applications. Trane custom air specialists receive additional, focused training in custom air-handling applications.

Trane custom application and design engineers work directly with you and your Trane sales team to help you create a safe, comfortable and efficient indoor environment for new and existing buildings, or develop stringently controlled conditions for process applications. It's like having your own custom design team.



Trane publishes literature, engineering bulletins, white papers, case studies, and pre-testing documentation to help you make the best business decision. Our commercial sales offices host engineers' breakfasts, lunch-and-learn sessions, and learning events at regulatory meetings. They also conduct seminars and training programs, arrange customer visits to our manufacturing facilities, and hold satellite broadcast events to provide you access to the knowledge of our experts.



### First Steps

Designing for a hospital? University? Federal government facility? Trane has experts experienced in these vertical markets and others to help you design and deliver the greatest value.

For a successful custom air-handling project, involve your local Trane sales team early - communication is key. Your Trane team includes factory application and design engineers with the custom expertise and systems knowledge to help you specify the optimal HVAC package for your new or existing building. The stage is set for meeting your performance, flexibility, schedule and budget expectations.

### On The Fast Track

Your Trane sales team will work with you at each stage of the process, from planning to installation and beyond. Our role is to achieve optimal solutions by understanding not only the details of your air-handling specifications, but your overall project goals, construction schedule, and budget constraints. Recognizing a need for speed on many custom projects, we use knowledge gained from our extensive experience

in the custom HVAC market, offering timely and cost-effective customization. With our history in Demand Flow® manufacturing, we can meet your performance and flexibility needs, and deliver it to your jobsite on schedule. Even if your project has a fast-track timetable, Trane can manage the coordination effort required.

### A Lasting Relationship

Trane is one of the world's largest suppliers of comfort systems for heating, ventilation, air conditioning and building management systems. We are committed to our customers. By understanding your business and its unique requirements, helping you design the optimal solution for your project, building undeniable value, and consistently delivering on our promises, we develop lasting relationships worldwide.

These relationships extend beyond the sale of our products. Our support also includes:

- Trane experts who can assist with installation and start-up, locally or around the world.

- Trane extended warranties.
- Trane factory-trained and certified technicians to service both Trane and non-Trane systems.
- Trane parts outlets offering OEM and replacement parts for use in all brands of HVAC equipment.
- Financing programs, including lease purchases and prepayment options with rebates.
- Trane's PACT™ (Performance Agreement for Comfort from Trane) program which integrates Trane's entire offering into a customized solution for you, addressing facility infrastructure concerns and improving operating efficiencies.



## A TEAMWORK APPROACH

### First Steps



### On the Fast Track



Your local Trane sales team – including factory application and design engineers – works with you every step of the way to help you meet your project goals, construction schedule, and budget constraints.

### A Lasting Relationship



Trane has experts who can help manage special delivery and staging details.



## Customized Performance

Trane Custom Climate Changer™ air handlers offer custom flexibility, components, and performance to meet your budget. Whether your specific need is an ultra-quiet unit, specialized ventilation monitoring capabilities, a unique footprint, or a custom casing that can be assembled on-site, Trane engineers will work closely with you to understand and meet your specifications, schedule, and budget.



With Trane custom air handlers you can “fine-tune” your performance to exactly meet your specifications. Trane can make recommendations on component selection based on pre-tested performance data gathered in our labs, positioning you to make a more informed decision. Though you are not limited to components Trane has pre-tested, Trane validated performance is available for many options, including:

- Trane coils with:
  - A unique, high-efficient fin design, optimizing the coil to the nearest fin-per-foot
  - The best moisture carryover limits in the industry
- Fans
- Traq airflow monitoring stations
- Trane energy recovery wheels
- Unit sound data
- Trane CDQ (Cool, Dry, Quiet) desiccant dehumidification
  - Breaks the dew-point barrier using standard equipment
  - Uses less energy than comparable systems

## It's All in the Details

By getting us involved in your project early, we can better understand the intricacies of the job that might affect your schedule, your budget, or the life-cycle cost of your project. After thoroughly reviewing these details, we will build and deliver a custom air handler that meets your expectations.

If your project demands special delivery and staging considerations, we have experts who can help manage those details also.



## No Surprises

When your project requires a custom air handler, certain expectations come with that requirement. You expect to get what you ordered. You expect quality. You expect reliable performance. You expect long life. With Trane, there are no surprises.

Data that we have gathered through years of testing in our research and development labs enables us to more accurately predict your specific unit performance. This data, used to engineer your custom air handler design, includes:

- ARI Standard 410 certified coil performance
- Unit casings designed for:
  - comfort and process applications from +/-6 to +/-12 inches w.g. of static pressure
  - air volume from 1500 cfm to 200,000+ cfm

- Unit air leakage rates between one-half and one percent
- Panel deflection characteristics
- Unit thermal performance with R-values up to 20
- Unit acoustical performance
- ARI Standard 1060 certified energy wheel performance

In addition to testing our designs in the laboratory, we test our air handlers during production. From running fans, to pressure testing our coils, to operating the controls, we provide you performance data in which you can be confident. If your requirements extend to post-production performance testing, including witness tests, we can coordinate them too.

You have enough to manage with your project. You don't need any last minute surprises with your custom air handler. With Trane, you can be confident that your unit will perform as we say it will.

## In Control

Trane factory-engineered control packages provide the added assurance that your system is operating efficiently. Trane controls provide industry-standard, open protocols with BACnet® and LonTalk®, allowing full two-way communication with existing equipment and systems. Other options include Modbus®, a common choice in industrial facilities.

To further optimize your system, Trane controls can be tied into a Tracer Summit® building automation system, resulting in a complete Trane Integrated Comfort™ system (ICS).

Whether your air handler control needs range from factory-mounted end devices only, to wired end devices using another manufacturer's unit controller, to a Trane ICS package, Trane puts you in control.

Custom air handlers can be a significant investment. Don't run the risk of losing the performance you specified due to poorly installed field controls.

## Energy Efficient

Trane custom air handlers are designed for energy-efficiency. In addition, Trane offers energy recovery components and energy-saving systems to minimize energy consumption.

Trane's EarthWise™ system is a design philosophy that incorporates low flow rate and low temperature on both the waterside and airside, along with high-efficiency equipment, to deliver:

- Reduced first cost
- Reduced operating costs
- Improved acoustical performance
- HVAC equipment and components that occupy less space



## User Friendly

Trane custom air handlers are built with installation and upkeep in mind. Many units are shipped completely assembled,

ready to rig into position with one single-point power connection. Should specific installation challenges exist, Trane can assess your needs and leverage previous installation experience to develop innovative solutions that will ease unit installation.

Because maintaining your equipment in top running order protects your investment and system performance, Trane offers ongoing maintenance, repair, and HVAC-system operation services, as well as extended warranties.

## Broad Support

A critical element in the company's history of growth is its highly respected global distribution capabilities. Trane has an impressive network of more than 1000 sales engineers and more than 2000 factory-trained, certified technicians to service both Trane and non-Trane systems. With 450 parts outlets across North America providing repair and maintenance supplies for use in all brands of HVAC equipment, and 250 sales and service distribution offices located in 192 countries, you can be confident that you will receive consistent quality and service —



whether your project is around the corner or around the world.

Trane support can also extend to the financial aspects of your project. Programs available to lighten the financial load include equipment leasing, performance contracting and prepayment discounts. Your local Trane sales engineer can provide details for these and other programs.

To learn more about Trane Custom Climate Changer™ air handlers, and other Trane products and service, contact your local Trane sales engineer or visit [www.trane.com](http://www.trane.com).

In Control

Energy Efficient

User Friendly

Broad Support

Trane custom air handlers offer the full spectrum of performance options, from highly flexible cataloged units with custom options to high-static pressure, fully customizable air handlers for process applications.





**Trane**  
**A business of American Standard**  
**Companies**  
**[www.trane.com](http://www.trane.com)**

*For more information, contact your  
local Trane office or e-mail us at  
[comfort@trane.com](mailto:comfort@trane.com).*

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Literature Order Number	CAH-SLB002-EN
Date	June 2005
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Stocking Location	Inland

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*Trane has a policy of continuous product and product data improvement and reserves the right to change design and specifications without notice.*