

# ASHRAE TECHNICAL COMMITTEES, TASK GROUPS, AND TECHNICAL RESOURCE GROUPS

## SECTION 1.0—FUNDAMENTALS AND GENERAL

- 1.1 Thermodynamics and Psychrometrics
- 1.2 Instruments and Measurements
- 1.3 Heat Transfer and Fluid Flow
- 1.4 Control Theory and Application
- 1.5 Computer Applications
- 1.6 Terminology
- 1.7 Business, Management, and General Legal Education
- 1.8 Mechanical Systems Insulation
- 1.9 Electrical Systems
- 1.10 Cogeneration Systems
- 1.11 Electric Motors and Motor Control
- 1.12 Moisture Management in Buildings

TG1 Exergy Analysis for Sustainable Buildings (EXER)

TG1 Optimization (OPT)

## SECTION 2.0—ENVIRONMENTAL QUALITY

- 2.1 Physiology and Human Environment
- 2.2 Plant and Animal Environment
- 2.3 Gaseous Air Contaminants and Gas Contaminant Removal Equipment
- 2.4 Particulate Air Contaminants and Particulate Contaminant Removal Equipment
- 2.5 Global Climate Change
- 2.6 Sound and Vibration Control
- 2.7 Seismic and Wind Restraint Design
- 2.8 Building Environmental Impacts and Sustainability
- 2.9 Ultraviolet Air and Surface Treatment

TG2 Heating, Ventilation, and Air-Conditioning Security (HVAC)

## SECTION 3.0—MATERIALS AND PROCESSES

- 3.1 Refrigerants and Secondary Coolants
- 3.2 Refrigerant System Chemistry
- 3.3 Refrigerant Contaminant Control
- 3.4 Lubrication
- 3.6 Water Treatment
- 3.8 Refrigerant Containment

TG3 HVAC&R Contractors and Design-Build Firms (CDBF)

## SECTION 4.0—LOAD CALCULATIONS AND ENERGY REQUIREMENTS

- 4.1 Load Calculation Data and Procedures
- 4.2 Climatic Information
- 4.3 Ventilation Requirements and Infiltration
- 4.4 Building Materials and Building Envelope Performance
- 4.5 Fenestration
- 4.7 Energy Calculations
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TRG4 Sustainable Building Guidance and Metrics (SBGM)

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- 5.1 Fans
- 5.2 Duct Design
- 5.3 Room Air Distribution
- 5.4 Industrial Process Air Cleaning (Air Pollution Control)
- 5.5 Air-to-Air Energy Recovery
- 5.6 Control of Fire and Smoke
- 5.7 Evaporative Cooling
- 5.8 Industrial Ventilation Systems
- 5.9 Enclosed Vehicular Facilities
- 5.10 Kitchen Ventilation
- 5.11 Humidifying Equipment

## SECTION 6.0—HEATING EQUIPMENT, HEATING AND COOLING SYSTEMS AND APPLICATIONS

- 6.1 Hydronic and Steam Equipment and Systems

- 6.2 District Energy
- 6.3 Central Forced-Air Heating and Cooling Systems
- 6.5 Radiant Heating and Cooling
- 6.6 Service Water Heating Systems
- 6.7 Solar Energy Utilization
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- 6.9 Thermal Storage
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## SECTION 7.0—BUILDING PERFORMANCE

- 7.1 Integrated Building Design
- 7.3 Operation and Maintenance Management
- 7.4 Building Operation Dynamics
- 7.5 Smart Building Systems
- 7.6 Systems Energy Utilization
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- 7.9 Building Commissioning
- TRG7 Tools for Sustainable Building Operations, Maintenance, and Cost Analysis (SBOMC)
- TRG7 Underfloor Air Distribution (UFAD)

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- 8.2 Centrifugal Machines
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- 8.9 Residential Refrigerators and Food Freezers
- 8.10 Mechanical Dehumidification Equipment and Heat Pipes
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TG8 Variable Refrigerant Flow (VRF)

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TG9 Justice Facilities (JF)

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- 10.10 Management of Lubricant in Circulation