



Update on the Code Development Process: ASHRAE Standard 90.1-2010

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Transforming America's Energy Future

Acknowledgements

Thanks to the following individuals for sharing their ASHRAE Standards update information with us today:

Mick Schwedler, The Trane Company

Chair, SSPC 90.1

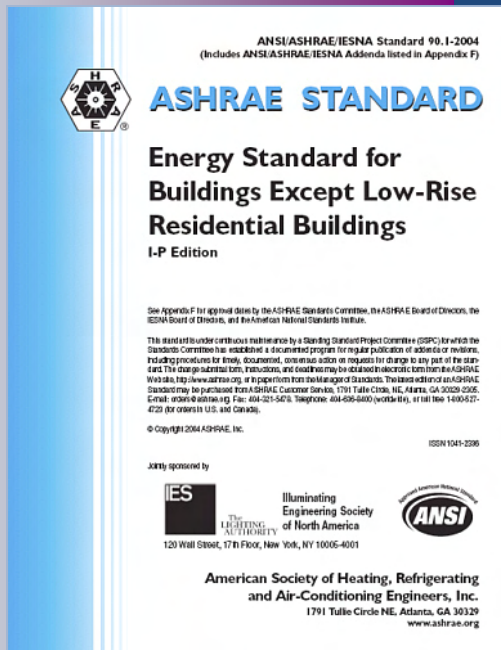
Kent Peterson

Chair, SSPC 189.1



ASHRAE Standard 90.1-2007

Purpose



“... Provide minimum requirements for the energy-efficient design of buildings except low-rise residential buildings”

ASHRAE Standard 90.1-2007

Sections

- Section 1: Purpose
- Section 2: Scope
- Section 3: Definitions, Abbreviations, and Acronyms
- Section 4: Administration and Enforcement
- Section 5: Building Envelope
- Section 6: HVAC
- Section 7: Service Water Heating
- Section 8: Power
- Section 9: Lighting
- Section 10: Electric Motors
- Section 11: Energy Cost Budget (ECB) Method
- Section 12: Normative References
- Appendices

SSPC 90.1 Accomplishments Towards ASHRAE's 30% Goal

- 90 Addenda processed for the 2010 Standard
 - 43 approved
 - 17 Awaiting BOD approval
 - 4 no comments, will move forward
 - 2 with unresolved commenters, expected to move forward
 - 15 in comment resolution
 - 7 new beginning public review January 2010

90.1 Progress Indicator Information

■ As of January 23, 2010

- 11.4% energy savings compared to 90.1-2004 – assuming same ventilation rate
- 15.1% energy savings compared to 90.1-2004 – assuming updated Standard 62.1 ventilation rates

- Energy Saving Addenda finished, but not included yet
 - E – Airside energy recovery
 - M – Chiller efficiency updates
 - S – Unitary equipment part load efficiency requirements
 - AL – Skylights, large spaces
 - BG – W2W heat pumps
 - BW – PTACs
 - AS – Lab Exhaust
 - CB – Dampers
 - AX – Kitchen Hoods

Additional energy saving PR addenda not included

- (Some) Energy Saving Addenda in Public Review and not included yet

- F – Roofs (cool)
- AM – Fenestration Infiltration
- AQ – TPS
- BB – Envelope
- BF – Continuous Air Barrier
- BI – Pipe Insulation
- BN – Fenestration Orientation
- BS – Receptacles
- BT – Chiller Adjustment
- BU – Computer Rooms
- BX – VAV Heating Temperatures

- (More) Energy Saving Addenda in Public Review and not included yet

- BY – Lighting Power Densities
- CD – Exterior Lighting Control
- CE – Multi-level Lighting Control
- CF – Stairway Lighting Control
- CK – Ventilation Reset

Standard 189.1 Now Available

for the Design of High-Performance Green Buildings

- ANSI standard being developed in model code language
- Provides minimum requirements for high-performance, green buildings
- Applies to all buildings except low-rise residential buildings (same as ASHRAE/IESNA Std 90.1)
- Not a design guide, not a rating system
- Published in 2009 and available now

Standard 189.1 Topic Areas

SS Sustainable Sites

WE Water Use Efficiency

EE Energy Efficiency

IEQ Indoor Environmental Quality

MR Building's Impact on the Atmosphere, Materials &
CO Resources

Construction and Operations Plans

Thank You for Your Attention!

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For more information on ASHRAE Standards 90.1 and 189.1, please see:

Information on Standard 90.1:

<http://www.ashrae.org/technology/page/548>

Information on Standard 189.1:

www.ashrae.org/greenstandard