



International Landscape

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ASTM International

- Develops voluntary consensus standards for materials, products, systems, and services
- Established in 1898
- 33,804 Members
- 12,160 standards published
- Headquartered in West Conshohocken, PA, USA
- Offices in:
 - Washington, D.C.
 - Mexico City
 - Beijing
- 135 Countries represented
- International Board of Directors:
 - Heads of National Standards Bodies DIN, JSA, and ABNT
 - Government – U.S. EPA
 - Global Companies –Dow Corning, Coca-Cola, Delta Faucet

E05 on Fire Standards
E06 on Performance of Buildings
E33 on Building and Environmental Acoustics
E60 on Sustainability
G03 on Weathering and Durability

D08 on Roofing and Waterproofing

D01 on Paint and Related Coatings, Materials and Applications

C11 on Gypsum and Related Building Materials and Systems

E34 on Occupational Health and Safety

A01 on Steel, Stainless Steel and Related Alloys

F16 on Fasteners

E53 on Property Management Systems

D22 on Air Quality

G01 on Corrosion of Metals

C14 on Glass and Glass Products

C24 on Building Seals and Sealants

D26 on Halogenated Organic Solvents and Fire Extinguishing Agents

D19 on Water

F06 on Resilient Floor Coverings

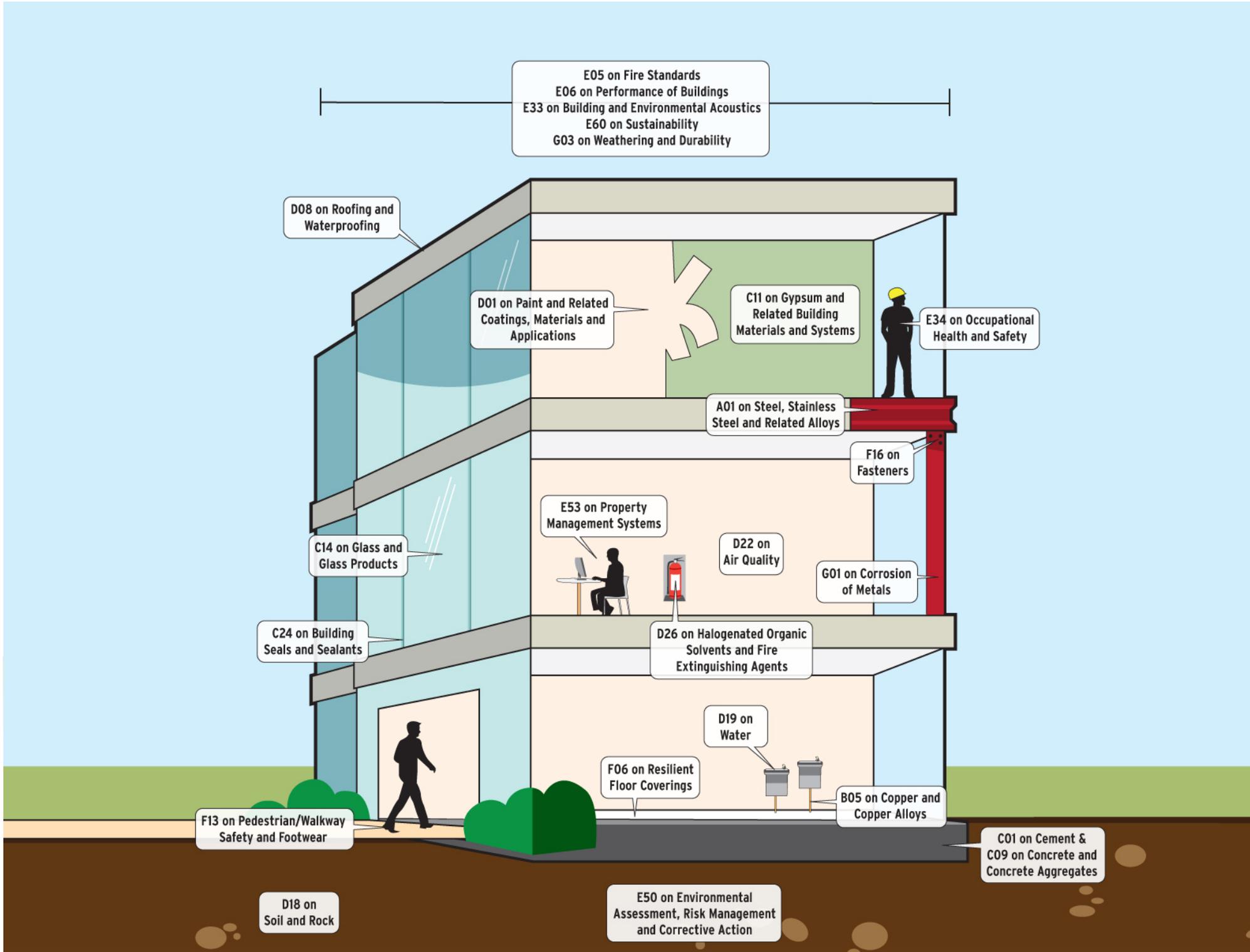
B05 on Copper and Copper Alloys

F13 on Pedestrian/Walkway Safety and Footwear

C01 on Cement & C09 on Concrete and Concrete Aggregates

D18 on Soil and Rock

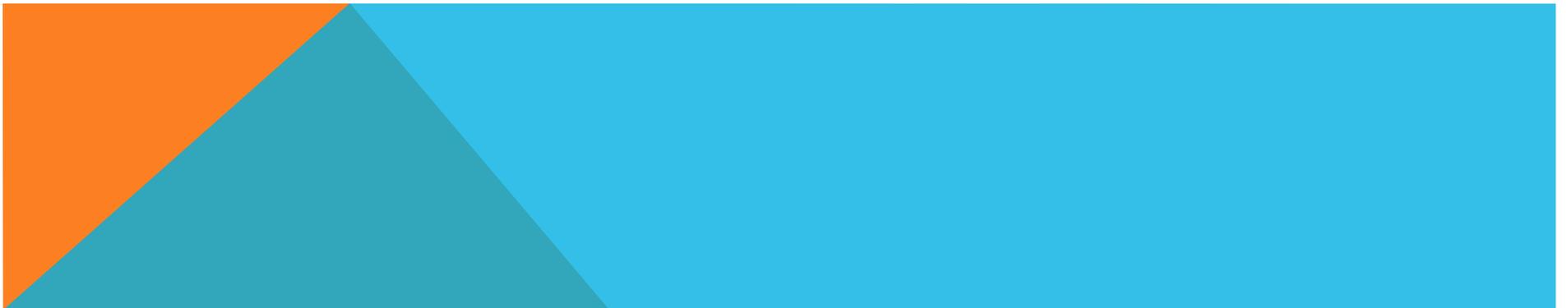
E50 on Environmental Assessment, Risk Management and Corrective Action



International Coordination

Measurement Science Challenges and Potential Solutions

- Defining the difference among standards and determine best choices
- Effective communication among international participants



ASTM Technical Committees

Committee E06 on Performance of Buildings- 1000+ Members

Technical Subcommittees

- E06.41 Air Leakage and Ventilation Performance
- E06.51 Performance of Windows, Doors, Skylights and Curtain Walls
- E06.92.03 US TAG to ISI/TC 59/SC3 Functional/User Requirements and Performance in Building Construction
- E06.92.14 US TAG to ISO TC 59/SC14 On Design Life
- E06.92.17 U. S. TAG to ISO TC59/SC17

Standards:

- ASTM E1680-95(2003) Standard Test Method for Rate of Air Leakage Through Exterior Metal Roof Panel Systems
- ASTM E283-04 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- ASTM E283-04 Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen
- ASTM E330-02(2010) Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference

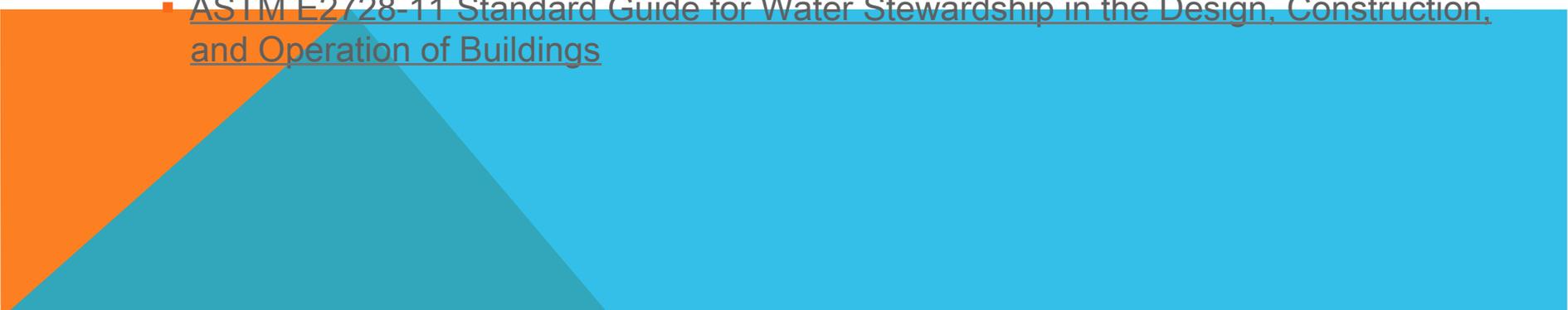
ASTM Technical Committees

Committee E60 on Sustainability -700+ Members

Technical Subcommittees

- E60.01 Buildings and Construction
- E60.92.17U. S. TAG to ISO TC59/SC17 Building construction / Sustainability in building construction

Standards:

- ASTM E2635-08 Standard Practice for Water Conservation in Buildings Through In-Situ Water Reclamation
 - ASTM E2717-11 Standard Practice for Estimating the Environmental Load of Residential Wastewater
 - ASTM 2727-10 Standard Practice for Assessment of Rainwater Quality
 - ASTM E2728-11 Standard Guide for Water Stewardship in the Design, Construction, and Operation of Buildings
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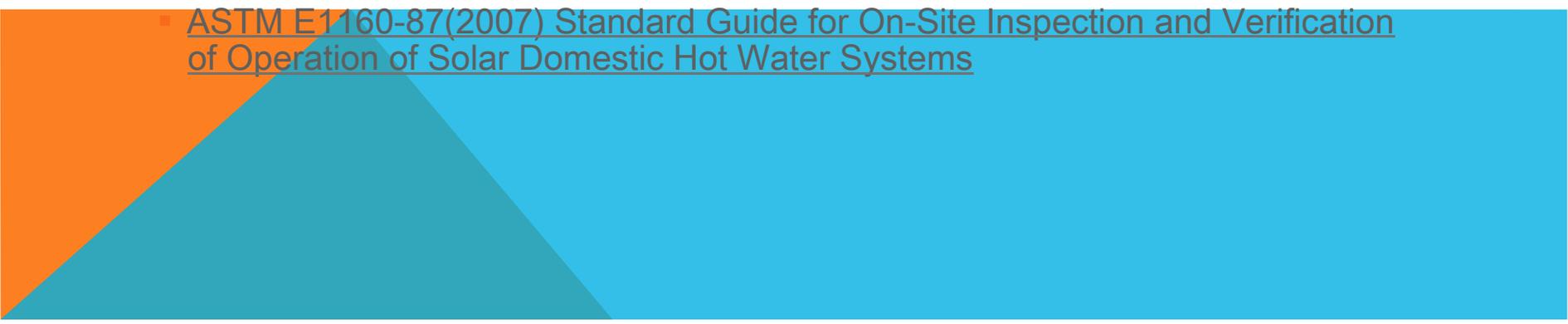
ASTM Technical Committees

Committee E44 on Solar, Geothermal and Other Alternative Energy Sources - 150+ Members

Technical Subcommittees

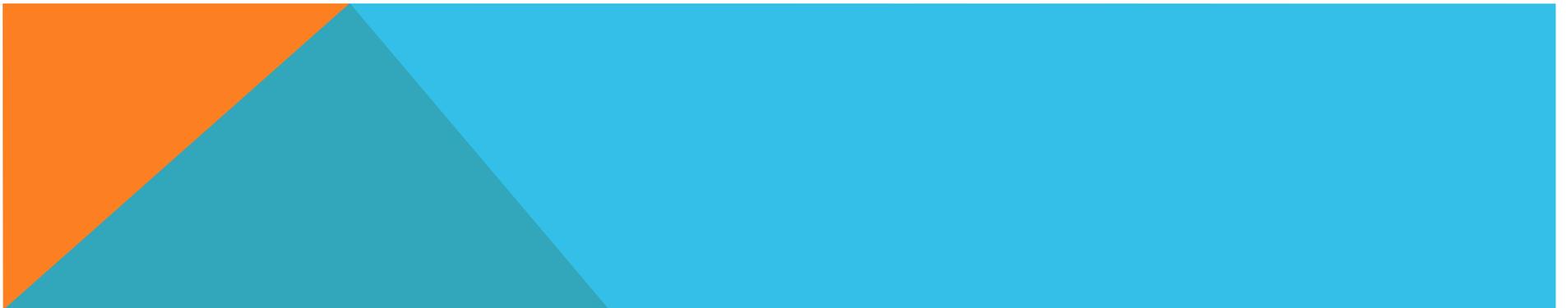
- E44.05 Solar Heating and Cooling Systems and Materials
- E44.09 Photovoltaic Electric Power Conversion
- E44.15 Geothermal Field Development, Utilization and Materials

Standards:

- ASTM E1980-11 Standard Practice for Calculating Solar Reflectance Index of Horizontal and Low-Sloped Opaque Surfaces
 - ASTM E1084-86(2009) Standard Test Method for Solar Transmittance (Terrestrial) of Sheet Materials Using Sunlight
 - ASTM E1089-86(2007) Standard Test Method for Water Penetration of Flat Plate Solar Collectors by Uniform Static Air Pressure Difference
 - ASTM E1160-87(2007) Standard Guide for On-Site Inspection and Verification of Operation of Solar Domestic Hot Water Systems
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Discerning what is applicable to Net Zero

- Air Leakage of Buildings - Air leakage sites are often difficult to locate because air flows may be small under the prevailing weather conditions. Wind conditions can aid in air leakage detection by forcing air to enter a building
- Insulation of Windows - This specification covers PB Exterior Insulation and Finish Systems (EIFS) defined as an exterior, non-bearing wall covering providing a weather-resistant exterior wall envelope on walls required to be combustible or noncombustible, fire-resistance-rated or nonfire-resistance-rated.





THANK YOU