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Standard Guide for Selection and Use of Keywords for Thermal Insulation Test Methods and Standards¹

This standard is issued under the fixed designation C 1302; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ϵ) indicates an editorial change since the last revision or reapproval.

¹ This guide is under the jurisdiction of ASTM Committee C16 on Thermal Insulation and is the direct responsibility of Subcommittee C16.95 on Editorial. Current edition approved <u>Aug. 15, 1995. May 1, 2004.</u> Published <u>October May 2004. Originally approved in</u> 1995. Last previous edition approved in 2002 as C 1302 – 95 (2002).

1. Scope

1.1 This guide has been prepared for use by ASTM technical committees and others in the preparation of ASTM standards pertaining to thermal insulations and to materials associated with them.

1.2 The keywords appear in alphabetical order.

1.3 All ASTM standards require a list of appropriate terms for indexing called Keywords. Keywords shall be listed at the end of the draft standard and will appear in the published document.

2. Significance and Use

2.1 The purpose of the keyword list is to provide a standard set of words that can be used in the preparation and reference of documents. Keywords are used to search for information.

2.2 Keywords are not defined in this guide.

2.3 Words referring to the singular include the plural also.

3. Keywords

3.1 absorption acoustical adhesion adhesive aircraft aluminum aluminum foil apparent application austenitic stainless steel backer board batts black body blanket block board boil-off calorimeter breaking load breaking strength bubble-pack insulation bubble-pack reflective insulation building envelope building insulation building technology bulk density burn potential

calcium silicate calculated energy savings calibration calorimeter ceiling panels ceiling tiles cellular glass cellular materials cellular plastic cellular polystyrene cellulose cellulosic fiber cement chemical analysis chloride coatings composite composite foam insulation board compressive pressure compressive resistance compressive strength computer program conditioning consistency construction and installation convergence factor cork corrosion cracking cryogenic temperatures curing data time interval deflection deformation delamination density design design density dished head segment doors duct liner duct work ducts and equipment dust dynamic measurement electrolytic copper elevated temperature emittance error analysis evacuated insulation evacuated reflective insulation expanded perlite expanded vermiculite expansion experimental design exterior exposure test faced foam board faced insulation

facing felt fenestration fibrous glass finishing fire resistive flanking loss flexibility flexible flexural strength fluoride foam foil laminates frame construction friability full scale testing fungi resistance glass fiber granular granular loose-fill guarded hot plate apparatus health hazards heat heat flow heat flow meter apparatus heat flux heat flux transducer heat gain heat loss heat transfer hemispherical high temperature calculation high temperature insulation hot-box hot-surface performance humid aging hydraulic-setting immersion in-situ measurement industrial application infrared inspection inorganic fiber instrument verification insulating cement insulation insulation cover insulation system interior radiation control coatings intermediate density sheathing interpretation of field data IR emmitance jacketing material laminate leachable chlorides length light frame construction line source heater linear changes

linearity lining loading tests loose fill low emittance low permeance low temperature insulation low-density manufactured housing mass loss mastic material mathematical model mean test temperature mechanical process membrane-faced metal building metal-mesh covered metallic reflective insulation method of mixtures mineral fiber minimum use temperature modulus of elasticity modulus of rupture (MOR) moisture content molded mounting of heat flux transducers multi-foil insulation multilayer insulations normal emittance nuclear power plant outdoor service vessel paint-high reflectance paint-high temperature paint-spray applied parting strength penetration performance criteria perlite permeability pН phenolic physical properties pipe density pipe insulation pipe systems pipe thermal insulation diameter pipe thermal insulation dimension pipe thermal insulation thickness plane and radial calculation plastic sheet and film plastics (general) polyethylene terephthalate reference film polyisocyanurate polystyrene polyurethane precision V-groove preconditioning

prefabricated insulation prefabricated panel preformed preformed thermal insulation program verification properties pseudo steady-state quality control R-value radial heat transfer radiant barrier system radiation radiation barrier radiation control coatings radiative transport reflectance reflective air space reflective coating reflective insulation reflective liner reflective paint reflective pipe insulation reflective system reflectivity regular density sheathing removable removable/reusable repair rigid rigid cellular plastic rigid cellular polyisocyanurate rigid cellular polystyrene rigid cellular polyurethane rigidity roof deck roof inspection roof insulation sampling sampling and acceptance criteria selecting temperatures selection selection and application sensor calibration sensor location sheet sheet material sheet radiant barrier shrinkage silicate single-sided soaking heat test sodium solar reflectance sound deadening board specific heat spray application spray applied squareness

steady state stress corrosion cracking structural insulation summation technique surface resistance temperature test tenacity tensile strength tension test specimen preparation thermal thermal capacity thermal conductance thermal conductivity thermal contact thermal diffusivity thermal insulating cements thermal insulating material thermal insulating materials-blanket thermal insulating materials-block and board thermal insulating materials-block and pipe thermal insulating materials-board thermal insulating materials-cement thermal insulating materials-glass thermal insulating materials-loose fill thermal insulating materials-mineral fiber thermal insulating materials-pipe thermal insulating materials-preformed thermal insulating materials-reflective thermal insulating materials-rigid thermal insulation thermal insulation application thermal insulating fitting cover thermal insulation for austenitic stainless steel thermal insulation handling thermal insulation permeability film thermal insulation storage thermal integrity thermal performance thermal property thermal resistance thermal resistivity thermal testing thermal transmission thermesthesiometer thickness thin-heater apparatus time-averaged vapor pressure total hemispherical emittance transducer design transducer sensitivity transmission-water vapor transverse strength trueness tubing thermal insulation thickness tubular tumble test U-value

unguarded hot plate vapor barrier finish vapor retarder verification vermiculite vessel lagging volume change volume loss wall sheathing warpage water absorption water equivalent water retention water vapor permeance water vapor sorption water vapor transmission wet covering capacity wet insulation width window

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