The National BIM Library

BIM Object Guide: Thermatex Aquatec 600 mm x 600 mm SK

Version 1.1

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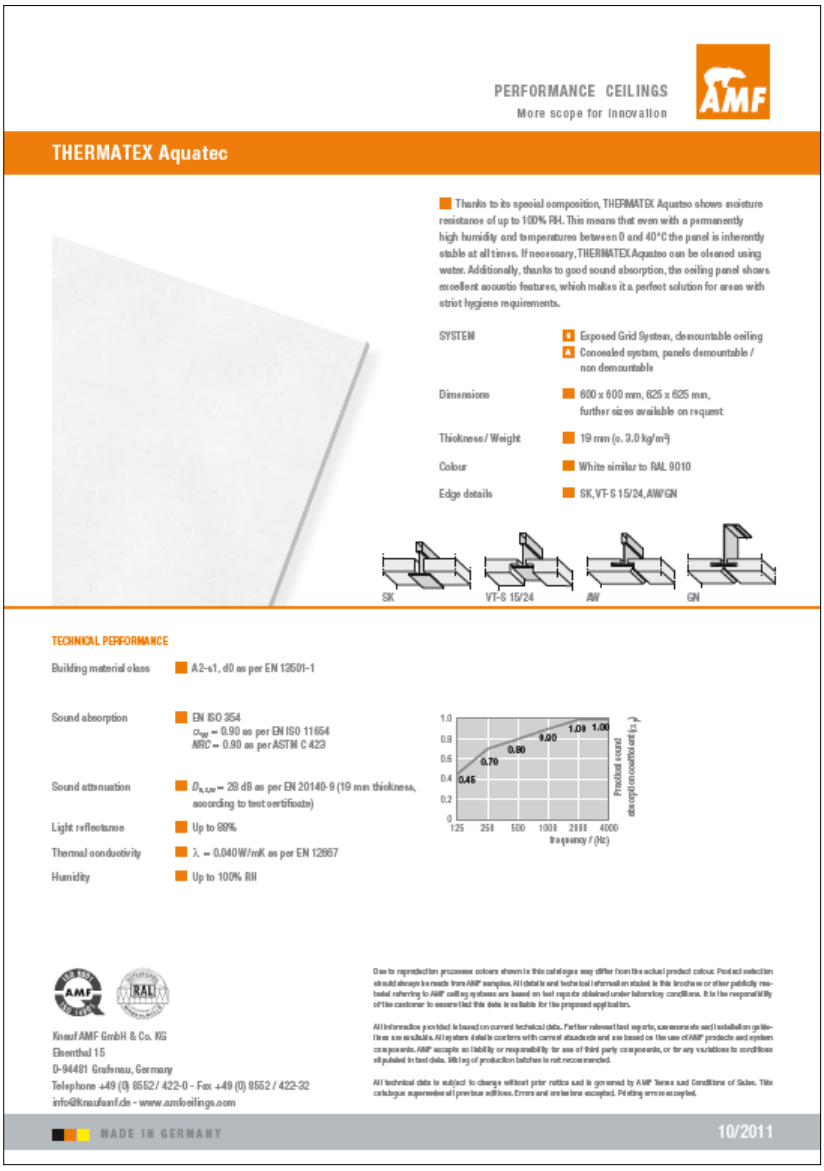
www.nationalBIMlibrary.com

Contents

1.0 Introduction

This guide covers the use of Knauf AMF Ceilings Ltd Thermatex Aquatec 600 mm x 600 mm SK included within the National BIM Library.

Knauf AMF Ceilings Ltd Thermatex Aquatec 600 mm x 600 mm SK


PERFORMANCE CEILINGS
More scope for innovation

THERMATEX Aquatec

Thanks to its special composition, THERMATEX Aquatec shows moisture resistance of up to 100% RH. This means that even with a permanently high humidity and temperatures between 0 and 40°C the panel is inherently stable at all times. If necessary, THERMATEX Aquatec can be cleaned using water. Additionally, thanks to good sound absorption, the ceiling panel shows excellent acoustic features, which makes it a perfect solution for areas with strict hygiene requirements.

SYSTEM	Exposed Grid System, demountable ceiling Concealed system, panels demountable / non demountable
Dimensions	600 x 600 mm, 625 x 625 mm, further sizes available on request
Thickness / Weight	19 mm (c. 3.0 kg/m²)
Colour	White similar to RAL 9010
Edge details	SK, VT-S 15/24, AW/GN

SK VT-S 15/24 AW GN

TECHNICAL PERFORMANCE

Building material class	A2-s1, d0 as per EN 13501-1
Sound absorption	EN ISO 354 α_w = 0.90 as per EN ISO 11654 NRC = 0.90 as per ASTM C 423
Sound attenuation	$D_{s,Rw}$ = 29 dB as per EN 20140-9 (19 mm thickness, according to test certificate)
Light reflectance	Up to 88%
Thermal conductivity	λ = 0.040 W/mK as per EN 12667
Humidity	Up to 100% RH

Practical sound absorption coefficient (α_p)
1.0 0.9 0.8 0.6 0.4 0.2 0
0.45 0.70 0.80 0.90 1.00 1.00
125 250 500 1000 2000 4000
frequency f (Hz)

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MADE IN GERMANY 10/2011

All products listed below are included in the following file:
nbl_KnaufAMFCeilings_ThermatexAquatec-600mmx600mm-SK

Thermatex Aquatec 600 mm x 600 mm SK

1.1 Naming

National BIM Library objects are named to identify their type and configuration. Fields are segregated using an under bar (_) and information within each field is segregated using hyphens (-). Fields are abbreviated to reduce characters and capitals used at the start of each abbreviation to aid readability.

File name and objects are named as below:

File name
Field1 *Author*_**Field2** *Category*_**Field3** *Manufacture**r***_**Field4** *Product Range*

Object
Field1 *Author*_**Field2** *Manufacture**r***_**Field3** *Product*

2.0 Parameters

Parameters included in the Thermatex Aquatec 600 mm x 600 mm SK object are as follows:

2.1 National BIM Library Parameters

Author	The name of the BIM objects Author.
BIMObjectName	Name of the BIM object as it will appear in software. Using NBL naming procedure.
Description	The full description of a product or system.
Help	URL of a website where additional help notes are available.
IssueDate	The issue date of this BIM object.
ManufacturerURL	URL of the product or system manufacturer.
NBSDescription	NBS Uniclass title.
NBSReference	NBS Uniclass section/clause number.
Version	The version number of the BIM object.

2.2 NBS Parameters

AcousticBarriers	Acoustic barriers to provide additional sound reduction performance.
AirPlenumBarriers	Plenum barriers should be either rigid or semi-rigid non porous sheets with smooth nondusting surfaces, or alternatively encapsulated mineral or glass wool lamella core boards or mats.
CeilingSupport	Suspended ceilings are usually one of two types - either non demountable suspended or demountable suspended. Board suspended ceiling systems frequently require wet finishing and are classed as non demountable. Due to their

weight they require a robust concealed suspension grid which includes primary channels with T or channel sections to which boards are screwed.

Demountable suspended ceilings are of dry construction and comprise a membrane of tiles, panels, trays, boards or fabric, supported by exposed or concealed suspended metal grids.

Fasteners

Top and bottom fixing components are normally supplied and installed by the suspended ceiling contractor. It is essential that the fixing methods used are adequate for both the weight of the ceiling system and the nature of the soffit material.

FireBarriers

Fire barrier systems offer solutions to prevent fire and smoke spread within roof and ceiling voids.

InfillUnits

The choice of infill unit will be dependent on a number of factors:

- Aesthetic requirements, including the chosen type of grid (exposed, semi concealed or concealed).
- The required performance of the suspended ceiling system including fire performance, hygroscopic performance and acoustic performance.
- Air tightness requirements for use of the ceiling void as a plenum.
- Durability, hygiene and cleaning requirements.

2.3 Manufacturers Parameters

EdgeDetails	Tile edge profile detail.
Humidity	Air always contains a certain amount of water vapour, termed relative humidity. Relative humidity is measured by comparing the actual mass of vapour in the air to the mass of vapour in saturated air. It is usually shown as a percentage. Products are given an RH value, expressed as a %, showing the maximum relative humidity the products can be used in.
LightReflectance	The amount of light, expressed as a %, reflected back when striking its surface.
SoundAbsorption	The loss of sound energy when striking the perimeter surfaces of a room or objects within that space. Ceiling products display an alpha w or NRC figure. The higher the figure, the higher the products ability to absorb sound.
Weight	Infill unit weight per m^2.

2.4 IFC Parameters

Note: IFC definitions have been obtained from BuildingSmart IFC2x3 website (http://buildingsmart-tech.org).

AcousticRating	Acoustic rating for this object. It is giving according to the national building code. It indicates the sound transmission resistance of this object by an index ration (instead of providing full sound absorption values).
Combustible	Indication whether the object is made from combustible material (TRUE) or not (FALSE).
Finish	Finish selection for this object. A specification of the surface finish for informational purposes.
FireRating	Fire rating for this object. It is given according to the national fire safety classification.
FlammabilityRating	Flammability Rating for this object. It is given according to the national building code that governs the rating of flammability for materials.
FragilityRating	Indication on the fragility of the covering (e.g., under fire conditions). It is given according to the national building code that might provide a classification for fragility.
Material	Main material of the covering, it should only be given, if no IfcMaterial class is assigned to the IfcCovering instance.
Permeability	Ratio of the permeability of the ceiling. The ration can be used to indicate an open ceiling.
Reference	Indication whether this object is designed to close automatically after use (TRUE) or not (FALSE).
SurfaceSpreadOfFlame	Reference ID for this specified type in this project (e.g. type 'A-1').
TileLength	Length of ceiling tiles. The size information is provided in addition to the shape representation and the geometric parameters used within.
TileWidth	Width of ceiling tiles. The size information is provided in addition to the shape representation and the geometric parameters used within.

TotalThickness	Total thickness of the material layer set is derived from the function IfcMlsTotalThickness.

2.5 COBie Parameters

The following COBie parameters have been included within the Thermatex Aquatec 600 mm x 600 mm SK object and can be used to prepare COBie data schedules:

AccessibilityPerformance	Accessibility issue(s) which the product satisfies.
AssetIdentifier	The asset identifier assigned to an occurrence of a product (prior to handover).
BarCode	The identity of the bar code (or rfid) given to an occurrence of the product.
CodePerformance	Code Compliance requirement(s) which the product satisfies.
Colour	Characteristic or primary colour of product.
Constituents	Optional constituent features, parts or finishes.
Cost	Cost impact of replacement process.
Documentation	Location (Uniform Resource Information) for further product information.
DocumentReference	Location (Uniform Resource Information) for the source or updates to this product information.
Features	Features or other important characteristics relevant to product specification.
Finish	Characteristic or primary finish of product.
Grade	Standard grading(s) to which the product corresponds.
InstallationDate	The date that the manufactured item was installed.
LifeCyclePhase	Life Cycle Phase as defined in ISO 15978.
Manufacturer	The organization that manufactured or assembled the item.
Material	Characteristic or primary material of product.
MethodOfMeasurement	Method of measurement.
ModelLabel	The model number assigned by manufacturer.

ModelReference	The name used by the manufacturer.
NominalHeight	Nominal height of product, typically the vertical or secondary characteristic dimension.
NominalLength	Nominal length of product, typically the larger or primary horizontal dimension.
NominalWidth	Nominal width of product, typically the characteristic or secondary horizontal or characteristic dimension.
Process	Specification of process.
ProductionYear	The year of production for the manufactured item.
ReferenceStandard	Reference standard(s) to which the product is compliant.
ReplacementCost	An indicative cost for unit replacement.
SerialNumber	The serial number assigned to an occurrence of a product by the manufacturer.
ServiceLifeDuration	The length or duration of a service life.
ServiceLifeType	The typical service life that is quoted for an artefact under reference operating conditions.
Shape	Characteristic shape of product.
Size	Characteristic size of product.
SustainabilityPerformance	Sustainability issue(s) which the product satisfies.
TagNumber	The tag number assigned to an occurrence of a product.
WarrantyDescription	Description of the warranty.
WarrantyDurationLabour	Duration of labour warranty (years).
WarrantyDurationParts	Duration of parts warranty (years).
WarrantyGuarantorLabour	Organization acting as guarantor of labour warranty.
WarrantyGuarantorParts	Organization acting as guarantor of parts warranty.
WarrantyStartDate	The date on which the warranty commences.

3.0 Abbreviations

nbl	National BIM Library