

## Acoustement 40<sup>®</sup> Environmental Sustainability

Acoustical Finishes from Pyrok™, Inc. Organized according to Green Format: A reporting Guide for Sustainable Criteria of Products.\*

#### 1. MasterFormat 2004

Section: 09 25 00 – Acoustical Spray on Finish 09 51 00 – Acoustical Ceilings

Product: Acoustement 40<sup>®</sup> acoustical finish

#### 2. Manufacturer's Information

Trade Name: Acoustement 40<sup>®</sup> Product: Acoustical Finish Manufacturer: Pyrok™, Inc

### **3. Product Description**

The Acoustement 40 acoustical finish system consists of a spray on trowel finish surface manufactured from a Portland cement base. Acoustement 40 is 41pcf density.

The system can be installed on ceilings and walls for both interior and exterior applications.

If a suspension system is required for the installation of Acoustement 40, the sustainability of the suspension system may also be considered.

## 4. Regulatory Agency Sustainability Approvals

New York City Department of Buildings Report of Material and Equipment Acceptance Division, MEA #376-88-M.

Material Safety data Sheet (MSDS) is available upon request.

# 5. Sustainability Standards and Certifications

Acoustement 40 acoustical finish may impact the following prerequisites and credits under the USGBC's LEED program (http://www.usgbc.com)

## EA Prerequisite 1 Fundamental Commissioning of the Building Energy System

Provide access doors if required for commissioning or maintaining building systems located above ceilings.

#### EA Credit 1 Optimize Energy Performance

Lighting Efficiency is dependent on the desired finish quality. The light reflectivity is as follows: Textured 42 in Semi-Smooth 62 in Painted 82 in (measured in accordance with DIN 5036 – Radiometric and Photometric Properties of materials).

Thermal Insulation: R-value = 0.75 (measured in accordance with DIN 52613 – Thermal Insulation Testing; Determination of Thermal Conductivity by the Tube Method when tested in a horizontal position).

## MR Credit 2.1 and 2.2 Construction Waste Management:

Packaging: 35lbs bags packaged in paper-polyethylene lined bags. 55 bags shrink-wrapped to a pallet -1100 bags per truckload. Scrap: See Article 10 and 12, below.

#### EQ Prerequisite 3 Minimum Acoustic Performance.\*\*

Acoustement sound absorptive finishes contribute to control of reverberation within classrooms.

Acoustement 40 can provide noise reduction coefficients (NRC) up to 0.70 at 1-1/2" thick (measured in accordance with ASTM C423 – Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method).

### EQ Credit 4.2 Low Emitting Materials

Acoustement products give off extremely low levels of VOCs: Acoustement 40 Finish: 0 gram/liter (measured in accordance with procedures outline in CPA method 24 "Volatile Organic Content (VOC) of paints and related coatings." The VOC was calculated using the equation referenced in ASTM D3960 "Determination of Volatile Organic Compound Content of Paints and related coasting")

### EQ Credits 8.1 and 8.2 Daylight and Views

See comment on lighting efficiency at EA credit 1, above.

## 6. Sustainable Performance Criteria

No criteria have been identified.

## 7. Sustainable Composition of Product

No criteria have been identified.



## 8. Material Extraction and Transportation

Acoustement 40 is processed and shipped from New Eagle, PA. It is composed of the following materials: -cement (Maryland) -lime (Ohio) -vermiculite (extracted in South Africa, processed Pennsylvania)

The mixture is shipped via truck. The light weight of the Acoustement 40 system minimizes energy expended in transport.

#### 9. Manufacturing Phase

No by-products are produced in the manufacturing process. No toxic or hazardous materials are used or produced. See MSDS.

#### **10. Construction Phase**

Unused finish coat materials can be saved for use on other projects. The light weight of Acoustement 40 simplifies handling and reduces installation energy use.

#### **11. Facility Operations Phase**

The acoustical properties of Acoustement 40 ceilings improve the acoustic quality of a space. Studies have shown that building occupants are more satisfied and productive in optimal acoustic environments.

Acoustement 40 is mold resistant.

#### 12. Deconstruction / Recycling

100 percent of demolition debris may be recycled as a fill material or roadway base material.

#### 13. Additional Information

Acoustement 40 is durable and can last the life of a building with minimal maintenance. The surface can be vacuumed with a stiff bristle brush or water washed. Small smudges can be removed with a soft pencil eraser. If necessary, the Acoustement 40 finish can be painted without loss of its sound absorbing properties.

#### **14. Certification**

The information provided herein concerning the sustainability of Acoustement 40 Acoustic Cement is true, correct, and verifiable.

Name: Howard Podolsky Title: General Manager \*GreenFormat is a format for organizing information pertaining to the environmental sustainability of building products. It is being developed by the Construction Specifications Institute (CSI). At the time this document was issued, GreenFormat has not been finalized.

For additional information, see <u>http://www.csinet.org/Home-Page-</u> <u>Category/Formats/GF</u>

\*\*EQ Prerequisite 3 – Minimum Acoustic Performance is currently only located in the 'LEED for Schools' Program.