DaeHyup

Marine & Offshore Deck
Covering and Spray Insulation





BILLYTEX DPU-BF DC

Sound Damping Floor system



Production description

BILLYTEX DPU-BF DC is a sound damping flooring structure with good sound & vibration damping performances. It is also satisfied with IMO 2010 FTP code.

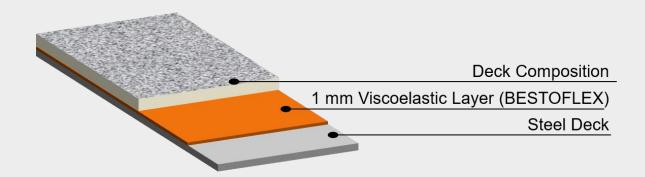
BILLYTEX deck compositions (BX-B, BX-BN, BX-LW, etc.) can be applied on viscoelastic (BESTOFLEX) layer.

Characteristics

- Good sound reduction properties
- Excellent adhesive strength and flexibility
- Excellent elasticity
- Non-combustibility

Application

 Accommodation decks in ships and offshore units where reduce impact & structure borne noise



| Product | Materials | Quantity (kg/m²) | Packing unit | Standard thickness |
|--------------------------|---------------------|---------------------|-----------------------------|-----------------------|
| BESTOFLEX (Viscoelastic) | Resin / Hardener | 1.3 | 8.0 (1.6) / 1.6 (0.6) Kg | 1.0 mm |

Note (): Small packing unit.

Certificates

| Classification society | CE (MED) | USCG | DNV- GL | BV | LR | ABS | KR | NK | RS |
|------------------------|-------------|------|------------|----|----|-----|----|----|----|
| BILLYTEX BESTOFLEX | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - |

Installation Steps

Surface Preparation

Deck surfaces should be free of dust, moisture, oil or grease and be primed with zinc silicate shop primer or equivalent finish. Be sure to check deck floor conditions (fairing, wavering, deformation, etc.) during cleaning and completely sealed holes and gaps below wall panel.

❖ Application of Viscoelastic Layer

Pour entire contents of the can containing 'Hardener' into the can containing 'Base' and blend thoroughly with the electric mixer for 2~3 minutes. Spread the viscoelastic mixture evenly at 1 mm thickness with a plastic or steel scratcher, and then sprinkle 1~2mm silica sands (approx. 200g/m²) on the viscoelastic layer.

Application of Deck Composition

After installed viscoelastic layer is dried enough, Billytex deck-composition can be installed only in accordance with the corresponding installation manuals to each system.

Installation suggestions

- Mixed viscoelastic shall be used within approx. 15 minutes.
- Installation shall be done in +5°C above (Room temperature)
- Installed viscoelastic shall not be exposed to moisture and to the temperature below +5°C until curing is completed.
- Keep the minimum distance between each steel plate.

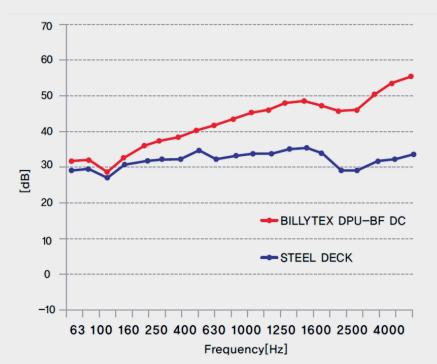
❖ Stock

- The stocks shall be stored in a dry place where contact with direct sunlight and water can be avoided. Viscoelastic compounds shall not be used after shelf-life.
- 2) 12 months of use-by date under ordinary condition is guar anteed.

> Technical data

| Product | Physical property | Result | Remarks |
|-----------------------------|---------------------|-----------------|---------|
| BESTOFLEX (Viscoelastic) | Basic | Polyurethane | |
| | Color | Various color | |
| | Density (g/cm³) | Approx. 1.3 | |
| | Pot life (minutes) | Approx. 15 | at 25°C |
| | Curing time (hours) | Approx. 8~10 | at 25°C |
| | Ambient temperature | +5°C~+30°C | |
| | Solid content | 100 | |
| | Solvent | Solvent free | |
| | Fire resistance | Non-combustible | |

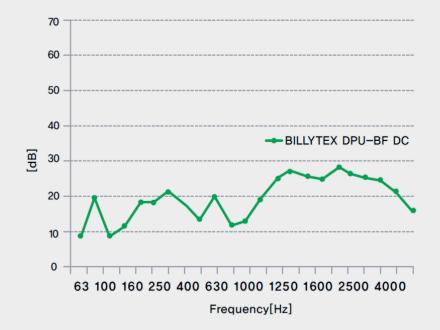
Airbrone Sound Insulation Performance



| HZ | dB | |
|------|------|--|
| 63 | 31.3 | |
| 80 | 31.8 | |
| 100 | 28.3 | |
| 125 | 32.5 | |
| 160 | 35.2 | |
| 200 | 37.0 | |
| 250 | 38.3 | |
| 315 | 40.2 | |
| 400 | 41.7 | |
| 500 | 43.1 | |
| 630 | 45.0 | |
| 800 | 46.2 | |
| 1000 | 48.0 | |
| 1250 | 48.7 | |
| 1600 | 47.6 | |
| 2000 | 45.8 | |
| 2500 | 46.1 | |
| 3150 | 50.2 | |
| 4000 | 53.5 | |
| 5000 | 55.2 | |
| Rw | 46 | |

Measured Sound Reduction Index for the BILLYTEX DPU-BF DC according to ISO 10140-2 and ISO 717-1.

Insertion Loss in Velocity Level (ILv)



| HZ | dB | |
|------|------|--|
| 63 | 8.6 | |
| 80 | 19.2 | |
| 100 | 9.8 | |
| 125 | 11.2 | |
| 160 | 18.6 | |
| 200 | 18.5 | |
| 250 | 21.3 | |
| 315 | 17.1 | |
| 400 | 13.6 | |
| 500 | 19.7 | |
| 630 | 11.9 | |
| 800 | 13.1 | |
| 1000 | 19.0 | |
| 1250 | 24.9 | |
| 1600 | 27.1 | |
| 2000 | 25.4 | |
| 2500 | 24.6 | |
| 3150 | 24.1 | |
| 4000 | 21.4 | |
| 5000 | 16.0 | |
| | | |

Measured Insertion Loss ILv for the BILLYTEX DPU-BF DC, expressed in dB per 1/3-octave frequency band. The insertion loss ILv refers to the mean velocity level in dB re 10⁻⁹ m/s.

Sound Tests carried out by Fir e Insurers Laboratories of Korea (FILK)

BILLYTEX DPU-BF DCSound Damping Floor System





DAEHYUP TECH CO., Ltd. provides comprehensive marine deck covering products such as powder, latex, epoxy and urethane types.

We have been developing our products more than three decades through various experiences in manufacturing and installations.

The quality of our products is assured by ISO 9001:2000 and approved by major authorities including leading classification societies in compliance with the IMO rules.



DaeHyup

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