Product Data Sheet

ASMACO FLOOR 6 ES

Multicomponent Epoxy Screed and Repair Mortar.

DESCRIPTION:

ASMACO FLOOR 6 ES system is a multicomponent epoxy screed designed to provide durable and abrasion-resistant protection for concrete floors. It is applied with a trowel at a thickness of 5 mm & 6 mm is suitable for use in hot and tropical climates**.** In addition to flooring, it can be used for coving or as a repair medium for damaged areas. Ideal for industrial and high-traffic environments, it offers long-lasting protection against wear and mechanical stresses.



KEY PERFORMANCE PROPERTIES

High Mechanical Strength

- **Durable under heavy loads**: The system provides exceptional mechanical strength, making it highly durable in environments subjected to intense physical stress, such as forklifts, heavy equipment, and high foot traffic.
- **Crack resistance**: Its strong adhesion to concrete surfaces ensures long-lasting performance without cracking or deteriorating under pressure or impact.

Impact and Abrasion Resistance

- **Withstands heavy traffic**: Designed to resist both **impact damage** (from dropped tools or heavy objects) and **abrasion** (from repeated wear caused by machinery or vehicles), this makes the floor system ideal for industrial environments.
- **Extended lifespan**: The abrasion resistance helps in reducing maintenance and replacement costs, ensuring that floors retain their integrity and appearance over time.

Non-slip, Non-skid Finish (Optional)

- **Enhanced safety**: The system can be finished with a **non-slip** or **non-skid surface**, which improves safety in areas where wet conditions, oil, or other slippery substances are present.
- **Customizable**: **A seal coat** with **anti-slip aggregates** can be added to suit specific safety requirements, particularly in environments where slip hazards are a concern (e.g., wet areas or food processing zones)

Non-tainting

- **Food-safe**: ASMACO FLOOR 6 ES system is **non-tainting**, meaning it doesn't release any harmful odors, vapors, or chemicals that could contaminate sensitive environments, such as **food processing** or **storage areas**.
- **Compliance**: This property ensures the product meets stringent hygiene and safety standards required for industries like **pharmaceuticals** or **food production**.

Excellent Chemical Resistance

- **Protection from chemicals**: ASMACO FLOOR 6 ES system has high resistance to a wide range of chemicals**,** including acids, alkalis, oils, solvents, and cleaning agents. This makes it ideal for areas exposed to potential chemical spills or aggressive substances.
- **Longevity in harsh environments**: This resistance ensures that the floor will remain unaffected by chemical exposure, maintaining its structural integrity and reducing the need for repairs or replacements.
- These key performance properties make the **ASMACO FLOOR 6 ES** system particularly suitable for industries like **manufacturing**, warehousing**,** engineering**,** and food processing**,** where floors must withstand both physical and chemical challenges.

These properties make the **ASMACO FLOOR 6 ES** system an excellent choice for heavy-duty industrial settings, where floors are subject to extreme mechanical stress, chemical exposure, and safety concerns.

AREAS OF APPLICATION

ASMACO FLOOR 6 ES system is ideal for **high-traffic areas**, offering floors with **superior mechanical properties** that provide excellent **abrasion** and **wear resistance**. It is suitable for general **floor repairs** in areas exposed to heavy, abrasive traffic and can be used for **joint arris repairs** or the reinforcement of heavily trafficked joints. The system is **non-tainting**, making it suitable for use in environments where **food is processed or stored**.
In continuously wet areas, **ASMACO FLOOR 6 ES** enhances safety by delivering a slip-resistant finish through the application of a seal coat with anti-slip aggregate.

- Common Applications:
- Loading bays
- Workshops
- Distribution centers
- Laydown areas
- Production halls
- Power installations
- Metal processing and engineering
- Food processing industries

EQUIPMENT & TOOLS

- **Vacuum recovery shot blasting machine**: For surface preparation and cleaning.
- **Masking tape / Polythene sheets**: To protect surrounding areas from splashes or spills.
- **Trowels**: For spreading and smoothing the epoxy material.
- **Slow speed drill with suitable paddle**: For mixing the epoxy components thoroughly.
- **Brushes or short nap hair rollers**: For applying the epoxy evenly.
- **Industrial vacuum**: To clean the area before and after application.
- **Scarifier**: To remove old coatings or prepare concrete (new & old) the surface.
- **Grinder**: For fine surface preparation and smoothing.
- **Overalls**: For personal protection during the application process.
- **Lighting**: To ensure proper visibility during application.
- **Spiked roller**: To remove air bubbles and ensure a smooth finish.
- **Spiked shoes**: To walk on the epoxy while it is curing without damaging the surface.
- **Pin screed**: For controlling the thickness of the epoxy layer.
- **Heaters**: For temperature control during cold weather applications.

METHOD OF APPLICATION

Preferred Method:

Substrate Quality and Pre-treatment:

- The concrete substrate must be solid, with a minimum compressive strength of 25 N/mm² and a pull-off strength of at least 1.5 N/mm².
- Ensure the substrate is clean, dry, and free of contaminants such as dirt, oil, grease, coatings, and surface treatments.
- Prepare the concrete mechanically using abrasive blast cleaning or scarifying to remove cement laitance and create an open-textured surface.
- Grind down any high spots. Weak concrete must be removed, and surface defects like blow holes and voids must be fully exposed.
- Repair the substrate, fill blowholes/voids, and level the surface using **ASMACOPOXY 90 FC.**
- Level uneven concrete to create a roughened flat surface. Repairs, if needed, should be performed using **ASMACO FLOOR 6 ES.**
- Prime or level the concrete or screed substrate to achieve an even surface.
- Remove all dust, loose, and friable material from the surface before applying the product, preferably by using a brush or vacuum.
- Ensure that expansion, control, and isolation joints in concrete are carried through the **ASMACO FLOOR 6 ES** floor and filled with a suitable sealant from the Anchor Allied Factory LLC range.

Mixing:

- Use a forced-action mixer for optimal results.
- Add the base, reactor, and color pack to the mixer, ensuring the complete contents of each container are emptied. Mix for 1 minute until a uniform color is achieved.
- Gradually add the aggregate component and mix for an additional 3 minutes until the mixture reaches uniform color and consistency.
- Mixing times may vary based on temperature, but 4 minutes is typically sufficient. Ensure consistent mixing times to maintain uniform color and avoid introducing excess air into the system.

Application:

Priming:

- Use **ASMACO PRIME P2-SF** for priming. Mix the two components with a slow-speed drill fitted with a suitable paddle until a uniform consistency is obtained. Do not split or divide the pre-weighed components.
- Apply the primer by brush or roller, ensuring it is well worked into the surface.
- Apply the primer according to the required coverage rate.
- Allow the primer to stand for 20 minutes, then check for absorption.
- If the surface appears matt due to absorption, apply an additional layer of primer.
- Apply the **ASMACO FLOOR 6 ES** while the primed surface is still tacky. If the primer hardens, reprime the surface within 24 hours.

Epoxy Mortar Screed Application:

- Divide the total area into manageable sections, applying only to the areas that can be completed within the product's pot life.
- Apply the mixed screed while the primer coat is still tacky.
- Spread the **ASMACO FLOOR 6 ES** mixture evenly onto the substrate using levelling boards and guide rails, creating a surcharge over pre-installed battens (e.g., steel guides set to the desired height).
- Heavily tamp the screed to the desired level for full compaction. For thicker applications, compact the screed in layers.
- Level the screed by running a straight-edge ruler across the battens, removing excess material.
- Thoroughly compact the material by tamping, smooth with a hand trowel, and finish with a steel float.

Cleaning of Equipment:

- Clean all tools and equipment immediately after use with a suitable solvent such as Xylene, MEK, or Acetone.
- Once the material hardens, it can only be removed mechanically.

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KEY CONSIDERATIONS

- Systems are provided in pre-measured packs that should never be split or divided. Always use the entire pack.
- Failure to follow the recommended storage conditions could lead to early degradation of the product packaging.
- Always apply over a primer that remains "tacky" – do not allow the primer to fully cure before application.
- Cement-based substrates must be at least 4 weeks old before application.
- Neglecting to assess and treat cracks can result in reflective cracking, reducing the floor's service life.
- Fully cured **ASMACO FLOOR 6 ES** can be coated with the appropriate **ASMACO FLOOR FC 150**. Refer to the overcoating product's method statement for coverage and application instructions.
- Before use, **ASMACO FLOOR 6 ES** should be stored in a covered, air-conditioned space and protected from extreme temperatures, as these can affect workability, finish, and curing time.
- In cold weather, correct conditioning is critical. Application should stop if the ambient or substrate temperature is expected to drop below 10°C. Consider that the substrate or base slab may be significantly colder than the surrounding air. In temperatures above 35°C, working time will be significantly reduced.
- For floors exposed to chemicals, oils, or requiring hygienic conditions, the finished surface must be sealed. Contact the ANCHOR ALLIED FACTORY LLC Technical Services Department for more information.
- Proper curing is essential for resin-based materials to achieve optimal performance. A minimum curing temperature of 10°C should be maintained, using additional heating if necessary.
- **Beware of condensation!** To minimize the risk of condensation, which can lead to poor adhesion or surface blooming, ensure that the substrate and uncured floor surface temperatures are at least 3°C above the dew point.

CLEAN UP

Spillages of component products should be absorbed on to earth, sand, or other inert material and transferred to a suitable vessel. Disposal of such spillages or empty packing should be in accordance with local waste disposal regulations.

PACKAGING

ASMACO FLOOR 6 ES is supplied as a multi-component pack. The Color Paste is available in RAL colors; please refer to the ASMACO FLOOR COLOR PASTE technical data sheet. Custom or special colors can be produced based on quantity—please contact the ANCHOR ALLIED FACTORY Technical Services Department for more information.

PRIMER:

ASMACO FLOOR PRIME P2-SF (Solvent Free):	4.00 Kg Set

NEUTRAL / PIGMENTED EPOXY SCREED:

ASMACO FLOOR 6 ES. (Neutral)	27.90 Kg Set
ASMACO FLOOR 6 ES. (Pigment)	28.30 Kg Set
PART A:	2.00 Kg
PART B:	0.90 Kg
ASMACO FLOOR COLOR PASTE.	0.40 Kg
ASMACO FLOOR 6 ES FILLER.	25.00 Kg
ASMACO CLEANER 2:	5 litre Cans
ASMACO FLOOR UV 2:	20.00 kg Set
ASMACO POXY 90 FC:	6.00 kg Set
ASMACO FLOOR FC 150:	28 Kg Set

COVERAGE RATE

COVERAGE RATE AT DIFFERENT THICKNESS:

ASMACO FLOOR PRIME P2 - SF:	4 – 6 m^2 / Kg
ASMACO FLOOR 6 ES:	~2.15 Kg / m^2 / **1.0 mm Thickness**
ASMACO FLOOR 6 ES:	~10.75 Kg / m^2 / **5.0 mm Thickness**
ASMACO FLOOR 6 ES:	~12.90 Kg / m^2 / **6.0 mm Thickness**

EPOXY REPAIR PUTTY:

ASMACO POXY 90 FC:	~1.65 Kg / m^2 / 1mm thickness

OPTIONAL SMOOTH FINISH COATING,

FLOOR FC 150,	3m^2 / Kg / Coat / 250 micron

OPTIONAL UV PROTECTIVE COATING, COVERAGE:

ASMACO FLOOR UV2:	4 - 6m^2 / Kg

STORAGE & SHELF LIFE

Store under warehouse conditions, 5°C between 30°C in the original, unopened packs.
For further information, refer to the Product Material Safety Data Sheet.

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HEALTH & SAFETY

ASMACO FLOOR 6 ES, ASMACO FLOOR PRIME P2-SF and ASMACO CLEANER 2 should not come in contact with skin and eyes or be swallowed. Avoid prolonged inhalation of solvent vapours.

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Safety Data Sheet and the container(s) and should not be used without reference to the Safety Data Sheet (SDS). All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards, and regulations.

Industrial Skin Cleanser, followed by washing with soap. Should accidental eye contamination occur, wash well with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately. Do not induce vomiting.

Fire

ASMACO CLEANER 2 is flammable. Do not expose to naked flames or other source of ignition. No smoking during use. Containers should be tightly sealed when not in use. In the event of a fire, extinguish with CO_2 or foam.

TYPICAL PROPERTIES

PROPERTIES	TYPICAL VALUES	TEST STANDARDS
Color Neutral	—	—
Pot Life @ 40°C	~20 min	—
Initial Curing Time @ 35°C	12 Hours	—
Foot Traffic @ 40°C after	24 Hours	—
Full Cure	~5 Days	—
Mixed Density, g/m³	2.14 ±0.02	ASTM D 1475
Compressive Strength @ 7 days	≥85 N/mm²	ASTM D 579 - 2023
Tensile Strength @ 7 days	≥15 N/mm²	ASTM D 638 - 2022
Bonding Strength (Concrete Failure)	≥2.5 N/mm²	ASTM D 4541
Flexural Strength	≥30.00 N/mm²	ASTM D790-17

Note: the values given are achieved in laboratory test, actual values obtained on site may show variations from above quoted, all values given are subject to tolerance of 5-10%.

Shipping Limitations: None

Note

The information and data contained in the product data sheet is believed to be accurate and reliable; however, it is the user's responsibility to determine suitability of the product for usage. Since the supplier cannot know all the uses, or the conditions of use to which the product may be exposed, no warranties concerning the fitness or suitability for particular use or purpose are made. It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application Likewise if the application, product specifications or manner in which our products are used require government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

Non – Warranty : Because the storage, handling and application of the material is beyond Anchor Allied Factory Ltd's control, we can accept no liability for the result obtained. Anchor Allied Factory Ltd's sole limited warranty is the product meets the manufacturing specifications in effect at the time of shipment. There is no warranty or merchantability or fitness for use, nor any expressed or implied warranty. Anchor Allied Factory Ltd will not be liable for any incidental and consequential damage of any kind. The exclusive remedy for breach of such limited warranty is a replacement of any product shown to be other than warranted. Suggestions of uses should not be taken as inducement to infringe any patents.

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MFG. OF SILICONE , ACRYLIC & POLYURETHANE SEALANTS, WATER PROOFING COATINGS, SELF - ADHESIVE TAPES, SPRAY PAINTS, CONTACT ADHESIVE, PVC CEMENTS, EPOXY STEEL