

Rittal SK Filter Mat Instruction Manual

For SK 3273, 3382/83/84/85/59 Cooling Units

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of the Rittal SK Filter Mat. This filter mat is designed for use with Rittal SK 3273, 3382/83/84/85/59 series roof assembly cooling units to ensure optimal performance and longevity of your equipment by filtering incoming air.

The Rittal SK Filter Mat is a crucial component for maintaining the efficiency of your cooling unit by preventing dust and debris from entering the system. Regular inspection and replacement are vital for effective operation.

2. SAFETY INFORMATION

Please read and understand all safety instructions before handling or installing the filter mat. Failure to do so may result in damage to the product or associated equipment.

- Always disconnect power to the cooling unit before attempting any installation, maintenance, or replacement of the filter mat.
- Handle the filter mat carefully to avoid damage.
- Ensure the filter mat is correctly oriented and securely fitted to prevent bypass airflow.
- Dispose of used filter mats according to local environmental regulations.

3. PACKAGE CONTENTS

Verify that all components are present and undamaged upon opening the package.

- 1 x Rittal SK Filter Mat (SK 3286.500)

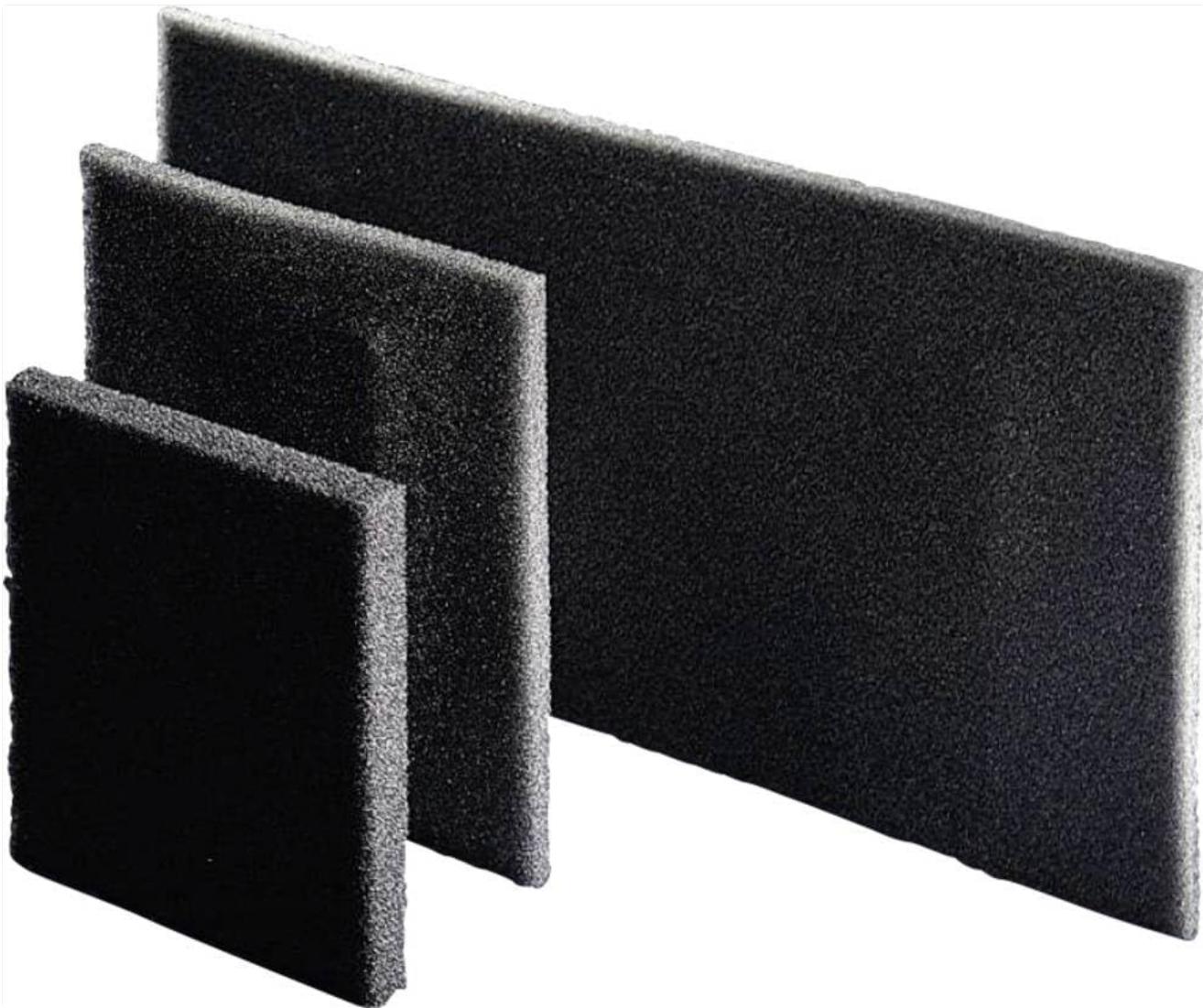


Figure 3.1: Rittal SK Filter Mat. This image displays three rectangular black foam filter mats of varying sizes, illustrating the product's appearance and texture.

4. SETUP AND INSTALLATION

The Rittal SK Filter Mat is designed for easy installation into compatible Rittal SK series cooling units.

- 1. Power Disconnection:** Before beginning, ensure the cooling unit is completely powered off and disconnected from the main power supply. This is a critical safety step.
- 2. Locate Filter Compartment:** Identify the filter compartment on your Rittal SK 3273, 3382/83/84/85/59 roof assembly cooling unit. Refer to your cooling unit's specific manual if you are unsure of its location.
- 3. Remove Old Filter (if applicable):** If replacing an existing filter, carefully remove the old, soiled filter mat from the compartment. Note its orientation for correct installation of the new filter.
- 4. Insert New Filter:** Place the new Rittal SK Filter Mat into the designated compartment. Ensure it fits snugly and completely covers the air intake opening. The filter mat should be oriented so that the air flows through it correctly (typically, the coarser side faces the incoming air, if distinguishable).
- 5. Secure Compartment:** Close and secure the filter compartment cover.
- 6. Restore Power:** Reconnect the cooling unit to the power supply and restore power.

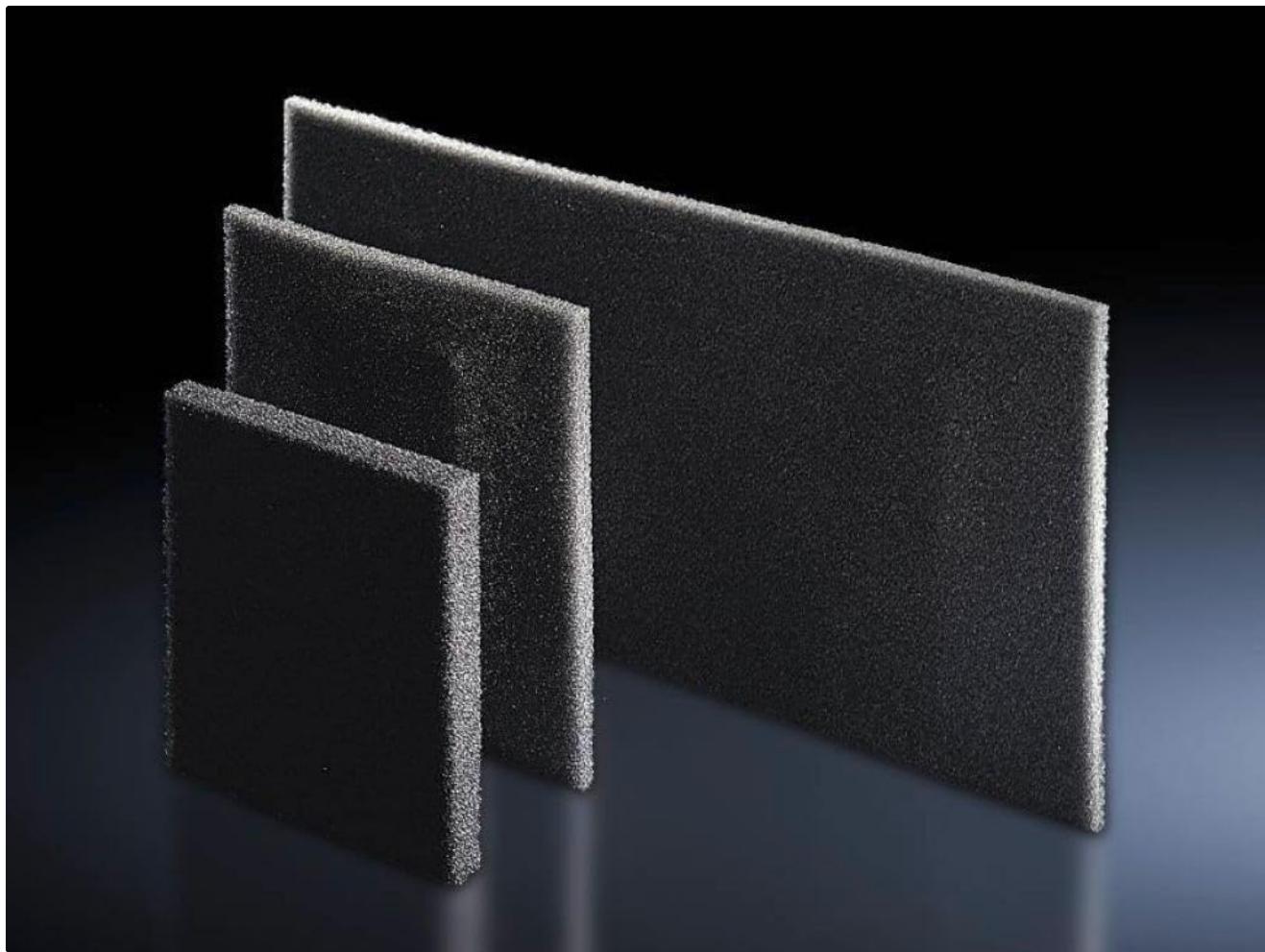


Figure 4.1: Rittal SK Filter Mat in a darker environment. This image provides a close-up view of the filter mat's porous texture, emphasizing its material composition.

5. OPERATING PRINCIPLES

The Rittal SK Filter Mat operates passively as part of your cooling unit's air intake system. Its primary function is to capture airborne dust, dirt, and other particulate matter before they can enter the cooling unit's internal components. This protection helps to:

- Maintain optimal airflow and cooling efficiency.
- Prevent buildup on heat exchangers and fans, which can lead to overheating.
- Extend the lifespan of the cooling unit's sensitive electronic and mechanical parts.

No active user interaction is required for the filter mat's operation once installed correctly. Its effectiveness depends on regular inspection and timely replacement.

6. MAINTENANCE

Regular maintenance of the filter mat is crucial for the efficient and reliable operation of your Rittal cooling unit.

6.1 Inspection Frequency

Inspect the filter mat regularly, typically every 2-4 weeks, or more frequently in dusty environments. A visible accumulation of dust and debris indicates the need for replacement.

6.2 Replacement Procedure

1. **Power Off:** Disconnect power to the cooling unit.

2. **Access Filter:** Open the filter compartment.
3. **Remove Old Filter:** Carefully remove the saturated filter mat.
4. **Clean Compartment:** Wipe down the filter compartment to remove any loose dust.
5. **Install New Filter:** Insert a new Rittal SK Filter Mat (Part No. SK 3286.500) into the compartment, ensuring correct fit and orientation.
6. **Close and Power On:** Close the compartment cover and restore power to the cooling unit.

Note: Rittal SK Filter Mats are designed for single use and should be replaced, not cleaned, to ensure optimal filtration performance.

7. TROUBLESHOOTING

This section addresses common issues related to the filter mat's performance.

Problem	Possible Cause	Solution
Reduced airflow from cooling unit	Filter mat is clogged with dust and debris.	Replace the filter mat with a new one.
Cooling unit overheating	Severely clogged filter mat restricting airflow.	Immediately replace the filter mat. Ensure proper ventilation around the cooling unit.
Dust inside cooling unit enclosure	Filter mat not installed correctly or damaged.	Check filter mat for proper seating and damage. Replace if necessary. Ensure filter compartment is sealed.

8. SPECIFICATIONS

Detailed specifications for the Rittal SK Filter Mat (Part No. SK 3286.500):

Manufacturer: Rittal

Part Number: SK 3286.500(VE3)

Model: SK

Material: Plastic

Colour: White

Dimensions (L x W x H): 1 cm x 26.8 cm x 34.4 cm

Weight: 0.38 Kilograms (380 g)

EMC Design: No

With Filter Mat: Yes (This product is the filter mat itself)

Item Package Quantity: 1

Compatible Cooling Units: Rittal SK 3273, 3382/83/84/85/59 series

9. WARRANTY AND SUPPORT

Specific warranty information for the Rittal SK Filter Mat is not provided in the product data. For details regarding warranty coverage, technical support, or to purchase replacement filter mats, please contact Rittal customer service or visit the official Rittal website.

You can typically find contact information and support resources on the manufacturer's official website: www.ittal.com

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