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O100634-1293588-03

Page

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Heidelberg Materials Cement Sverige AB  
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Sweden

## Verification document for moderate heat of hydration (MH) according to SS 134202:2021, low alkali content (LA) according to SS 134203:2022 and national sulfate resistance (NSR) according to SS 134204:2022

Issued for

### Heidelberg Materials Cement Sverige AB

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#### Product description

Portland-fly ash cement CEM II/A-V 42,5 N Slite, CE certificate number 0402 – CPR – SC1082-14, which fulfils the requirements of SS-EN 197-1:2011.

#### Trade name

Portland-fly ash cement CEM II/A-V 42,5 N – MH/LA/NSR – Slite

#### Intended use

Preparation of concrete, mortar, grout and other mixes for construction and for the manufacture of construction products.

#### Verification

The product has been verified against the requirements for:

- Moderate heat of hydration (MH) according to SS 134202:2021 (heat of hydration  $\leq 320$  J/g at 7 days, characteristic value, determined according to SS-EN 196-11:2019)
- Low alkalinity (LA) according to SS 134203:2022 (characteristic value of  $\text{Na}_2\text{O}_{\text{eq}}$  in the Portland cement clinker is  $\leq 0,6$  %)
- National sulfate resistance (NSR) according to SS 134204:2022 ( $\text{SO}_3$  content in the cement  $\leq 3,0$  %, characteristic value  $\text{C}_3\text{A}$  content in the Portland cement clinker  $\leq 3$  %, characteristic value)

#### Control

The manufacturers autocontrol will be monitored in 2024 by RISE Research Institutes of Sweden AB. RISE is a notified body (number 0402) for product certification against EN 197-1. The

#### RISE Research Institutes of Sweden AB

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Confidentiality level

C2 - Internal

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control is carried out by RISE Infrastructure and Concrete technology. The control includes evaluation of tests (carried out by RISE and Heidelberg Materials Cement Sverige AB) with regard to heat of hydration and sulfate content on audit samples of the cement, taken by RISE six times per year. The verification of alkali content and C<sub>3</sub>A content is carried out based on the manufacturers documented autocontrol and is not determined on audit samples, since these requirements, according to the standards, are related to the Portland cement clinker.

**Producing factory**

Owner: Heidelberg Materials Cement Sverige AB  
Factory: Heidelberg Materials Cement Sverige AB, Slite  
Product identification: Portland-fly ash cement EN 197-1 – CEM II/A-V 42,5 N – MH/LA/NSR – Slite

**Assessment basis:**

Documents from RISE AB:

- Report P117271-02 SL dated 2023-03-29 (test report for 2023)
- Report P117271-04 SL dated 2023-05-19 (test report for 2023)
- Report P117271-06 SL dated 2023-07-21 (test report for 2023)
- Report P120889-02 SL dated 2024-04-16 (test report for 2024)
- Report P120889-04 SL dated 2024-06-19 (test report for 2024)
- Report P120889-06 SL dated 2024-09-30 (test report for 2024)
- Report P120889 utv 1 SLFA dated 2024-10-21 (evaluation for 2023/2024)

Documents from Heidelberg Materials Cement Sverige AB:

- Documented autocontrol covering July 2023 to June 2024
- The manufacturers audit sample test results during 2023/2024 (six samples)

**Verification**

The product fulfils the requirements for moderate heat of hydration (MH) according to SS 134202:2021, low alkali content (LA) according to SS 134203:2022 and national sulfate resistance (NSR) according to SS 134204:2022 as well as the requirements of third part control in AMA Anläggning 23 chapter EBE 1.

**Comments**

The product is CE-marked, declaration of performance Nr 0402-DoP-SE13-SC1082-14 dated 2023-12-19, and fulfils the requirements in EN 197-1 :2011 and EN 197-2:2000.

**Period of validity**

This verification document is valid until December 31, 2025

**RISE Research Institutes of Sweden AB  
Infrastructure and Concrete technology – Material Lab**

Issued by



Lovise Sjöqvist

# Verifikat

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## Signerare

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