

# CM MEASUREMENT RECORD ACCORDING TO WORKING INSTRUCTIONS

RETANOL® XTREME/XTREME PRO 1



<input type="text"/>	<input type="text"/>
Client	Construction Phase/Component/Floor/Apartment
<input type="text"/>	<input type="text"/>
Construction Projekt	Component
<input type="text"/>	
Date of application/laying	

**REQUIREMENT: PCT MEASURING INSTRUCTION**

CM Service Measurement\*       CM Approval Measurement\*

\*Explanation overleaf.                      \*Explanation overleaf.

## DOCUMENTATION

Measurment No. <sup>1)</sup>	1	2	3
Room No.			
Tester			
Date			
<b>Test result</b>			
Weight of sample      g			
Manometer reading      bar			
Water content <sup>2)</sup> %			
Temperature °C / Air humidity    %			
Screed thickness      mm			

<sup>1)</sup>Only required if screed was too moist during 1st measurement. <sup>2)</sup>From conversion table of manufacturer of CM device: corresponds to CM %.

<input type="text"/>	<input type="text"/>	<input type="text"/>
Floor covering	Floor heating/Temperature	Area
<input type="text"/>		
Product	Dosage	Type of cement
<input type="text"/>		
Gravel supplier	Order according to DIN 1045-2	
<input type="text"/>	<input type="text"/>	<input type="text"/>
Builder-owner/Client; Stamp/Signature	Site Manager/Architect; Stamp/Signature	Floor covering layer; Stamp/Signature
<input type="text"/>		
PCT employee	Place/Date	Stamp/Signature

# DECLARATION OF EXEMPTION CM MEASUREMENT

**CM Service Measurement:** Service measurements are performed in order to demonstrate the drying process of Retanol® screeds. Service measurements are not approval measurements and do not exempt the contractor commissioned with laying the floor covering from his due diligence obligation.

**CM Approval Measurement:** On request and on assignment PCT performs approval measurements on the object and assumes warranty for the test criterion of workability.

The declaration of exemption is granted in writing for every object. Declarations of exemption are never granted orally. Declarations of exemption are only granted if a CM measurement has been performed by an authorised PCT employee.

## CM MEASURING INSTRUCTION FOR RETANOL® SCREEDS

1. Samples must be taken over the total cross-section of the screed to be measured. The top 2 mm must be removed in order that no surface moisture is also measured.
2. Fill the accurately weighed and crushed sample (50g) and the 4 steel balls into the CM pressure cylinder. Then hold the CM pressure cylinder in an inclined position and carefully slide in a calcium carbide vial.
3. Close the CM pressure cylinder with the lid and crush the CM vial by vigorous horizontal shaking.  
**When beginning the measurement, please note the time with a suitable stopwatch.**
4. Then carry out circular and horizontal movements with the CM pressure cylinder for two minutes to further crush the sample material and to mix it with the calcium carbide. Repeat this process for one minute after five minutes (circular movements). Read the value after 10 minutes. Prevent the steel balls from vertical knocking against the measuring head below the manometer. This will damage the measuring head and the measured values will be useless.  
**Always wear gloves during the measurement!**

Type of planned covering	3 - 8 days	9 - 28 days	29 - 56 days	from 57 days
Stone and ceramic coverings in thin bed method	3,2 %	3,0 %	2,6 %	depending on the sorption isotherm
Textile floor coverings	3,2 %	3,0 %	2,6 %	
Linoleum, rubber and similar without floor heating	3,2 %	3,0 %	2,6 %	
Linoleum, rubber and similar on floor heating	3,0 %	2,8 %	2,4 %	
Parquet without floor heating	3,2 %	3,0 %	2,6 %	
Parquet on floor heating	3,0 %	2,8 %	2,4 %	
Laminate without floor heating	3,2 %	3,0 %	2,6 %	
Laminate on floor heating	3,0 %	2,8 %	2,4 %	
Stone and ceramic coverings in thick bed method	4,2 %	4,0 %	3,6 %	
Screed insulation and screed sealings	5,2 %	5,0 %	4,6 %	

Screeds laid on floor heating must be heated and cooled according to the heating record of the manufacturer before laying the covering. The workability of Retanol® screeds can only be determined by CM measurement. Other measuring methods are unsuitable and give incorrect results.