

# Sika® Unitherm® Steel S-60

## DECLARATION OF PERFORMANCE No. 30371890

1	<b>UNIQUE IDENTIFICATION CODE OF THE PRODUCT- TYPE:</b>	30371890
2	<b>INTENDED USE/S</b>	EAD 350402-00-1106: ETA 20/1161:2020 Reactive Coating for the Fire Protection of Steel Elements
3	<b>MANUFACTURER:</b>	Sika Service AG Tüffenwies 16-22 8064 Zürich Switzerland
4	<b>AUTHORISED REPRESENTATIVE:</b>	
5	<b>SYSTEM/S OF AVCP:</b>	System 1
6b	<b>EUROPEAN ASSESSMENT DOCUMENT:</b>	EAD 350402-00-1106
	European Technical Assessment:	ETA 20/1161 of 18/12/2020
	Technical Assessment Body:	FIRES, S.R.O.
	Notified body/ies:	0761, 1396

### Declaration of Performance

Sika® Unitherm® Steel S-60  
30371890  
2021.05, ver. 02

## 7 DECLARED PERFORMANCE/S

Sika® Unitherm® Steel S-60 has been assessed as being compatible with the following primers and primer sets:

Primers				
Primer Reference	Primer Type	Tested Nominal Primer DFT (mm)	Permitted Primer Thickness Range (mm) <sup>1</sup>	
			Minimum	Maximum
Sika® Permacor® 2706 EG <sup>2</sup>	Two component epoxy <sup>2</sup>	0.050 – 0.080	0.025	0.120
Sika® Permacor®-1705 <sup>2</sup>	Solvent containing sing component zinc-phosphate primer <sup>2</sup>	0.080	0.040	0.120
SikaCor® Zinc R <sup>2</sup>	Zinc-rich epoxy <sup>2</sup>	0.080	0.040	0.120
SikaCor® Zinc W <sup>2</sup>	Zinc-rich epoxy <sup>2</sup>	0.080	0.040	0.120
(SikaCor® EG Phosphat + SikaCor® EG4) <sup>3</sup>	SikaCor® EG Phosphat: Epoxy zinc phosphate + SikaCor® EG4: a two pack Polyurethane topcoat	(0.148 + 0.120) 0.268	(0.074 + 0.060) <sup>6</sup> 0.134	(0.178 + 0.144) <sup>6</sup> 0.322
(SikaCor® EG1 + SikaCor® EG Phosphat + SikaCor® EG4) <sup>3</sup>	SikaCor® Eg1: Epoxy intermediate coat + SikaCor® EG Phosphat: Epoxy zinc phosphate + SikaCor® EG4: A two pack Polyurethane topcoat	(0.124 + 0.144 + 0.110) 0.378	(0.062 + 0.072 + 0.055) <sup>6</sup> 0.189	(0.148 + 0.172 + 0.132) <sup>6</sup> 0.452
(Sika® Permacor® 2029 + Sika® Permacor® 2230 VHS) <sup>3</sup>	A two pack Acrylic-Polyurethane topcoat + A two pack Acrylic-Polyurethane topcoat	(0.124/0.160 + 0.134) 0.258/0.294	(0.062/0.080 + 0.067) <sup>6</sup> 0.129/0.147	(0.148/0.192 + 0.160) <sup>6</sup> 0.308/0.352
Sika® Permacor® 2029 <sup>4</sup> (corroded)	Very high solid epoxy	0.075	0.038	0.112
Sika® Permacor® 2004 <sup>4</sup> (corroded)	Very high solid epoxy	0.075	0.038	0.112
Sika® Permacor® 2706 EG (galvanised) <sup>5</sup>	Two component epoxy	0.040	0.020	0.060

DFT: Dry Film Thickness

<sup>1</sup> The permitted theoretical minimum and maximum DFTs can not be less or exceed the DFT for each product as recommended by the manufacturer. The practical information given by the manufacturer must be followed

<sup>2</sup> The generic approval is applicable to other primers from the same generic group provided the thickness is within the tolerance given. The approval does not cover galvanized steel

<sup>3</sup> The approval is applicable to specific primer/primer set. The approval does not cover galvanized steel

<sup>4</sup> The approval is applicable to specific primer. Steel pate was shot blast cleaned to ISO 8501-1 Sa2.5 and left outside before got covered with rust but no pitting visible. Then hand tool cleaning method (wire brush) was used to prepare steel surface to grade St2 according to ISO 8501-1 prior application of primer

<sup>5</sup> The approval is applicable to specific primer. The approval covers galvanized steel.

Sika® Unitherm® Steel S-60 has been assessed as being compatible with the following topcoat:

Topcoats				
Topcoat Reference	Topcoat Description	Tested Nominal Topcoat DFT (mm)	Permitted Topcoat Thickness Range (mm)	
			Minimum	Maximum <sup>2</sup>
Sika® Unitherm® Top S <sup>1</sup>	A high build single pack topcoat	0.100	0.100	0.150
SikaCor® EG5 <sup>1</sup>	A two pack Polyurethane topcoat with good gloss and colour retention	0.080	0.080	0.120

<sup>1</sup> The approval is limited to the specific product

The reactive coating system has been assessed as having passed the requirements for durability according to EAD 350402-00-1106. The following table summarises passed requirements for durability for Sika® Unitherm® Steel S-60:

Top Coat Reference	Topcoat Description	Approved Top Coat Colours	Durability Approvals Based On The Carried Out Testing			
			Type Z <sub>2</sub>	Type Z <sub>1</sub>	Type Y	Type X
No Top Coat	-	-	✓	✓		
SikaCor® EG-5 <sup>1</sup>	A two pack Polyurethane topcoat with goog gloss and colour retenetion	All colours	✓	✓		
Sika® Unitherm® Top S <sup>1</sup>	A high build single pack topcoat	All colours	✓	✓	✓	✓

<sup>1</sup> The approval is limited to the specific product.

### Declaration of Performance

Sika® Unitherm® Steel S-60  
30371890  
2021.05, ver. 02

The final product was subjected to the identification testing in accordance with the methods of identification defined in Table 4 of EAD 350402-00-1106.

Product: Reactive coating		Intended use: Fire protection of structural steel elements
Assessment method	Essential characteristic	Product performance
<b>BASIC WORKS REQUIREMENT 2: SAFETY IN CASE OF FIRE</b>		
EN 13501-1	Reaction to fire	Class E
EN 13501-2	Resistance to fire	(R15 to R60) - IncSlow (I/H Beams and Columns as well as Hollow Columns) (see Annex A)*
<b>BASIC WORKS REQUIREMENT 3: HYGIENE, HEALTH AND THE ENVIRONMENT</b>		
Manufacturer's declaration and EN 16516	Content, emission and or release of dangerous substances	Product specification doesn't contain dangerous substances given in Annex XVII of REACH and the ECHA Candidate List of Substances of Very High Concern Use categories: IA1 and S/W2 Results for reactive coating to EN 16516 after 28 days: No Performance Assessed
<b>BASIC WORKS REQUIREMENT 4: SAFETY AND ACCESSIBILITY IN USE</b>		
EAD 350402-00-1106 Clause 2.2.4 and Clause 2.2.5	Adhesion and Durability	<ul style="list-style-type: none"> <li>• Primer and top coat compatibility</li> <li>• Type X durability</li> <li>• Type Y durability</li> <li>• Type Z<sub>1</sub> durability</li> <li>• Type Z<sub>2</sub> durability</li> </ul>
EAD 350402-00-1106 Clause 2.3.5	Identification	Thermoanalytical analyses (TG) and Infrared spectroscopy analyses (IR)

\* Sika® Unitherm® Steel S-60 has been tested and assessed as being capable on maintaining fire resistance performance up to 75 minutes. Therefore, tables with result for fire resistance periods up to 75 minutes are provided in ETA 20/1161.

#### Declaration of Performance

Sika® Unitherm® Steel S-60  
30371890  
2021.05, ver. 02

---

**8 APPROPRIATE TECHNICAL DOCUMENTATION AND/OR -  
SPECIFIC TECHNICAL DOCUMENTATION**

---

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

---

Name: Thomas Kerkmann  
Function: Head of Industrial Coatings

Name: Robin Rohleder  
Function: Market field Manager Fire protection

At Vaihingen on 31 May 2021

At Vaihingen on 31 May 2021

*Thomas Kerkmann*

*Robin Rohleder*

.....

.....


---

End of information as required by Regulation (EU) No 305/2011

**Declaration of Performance**

Sika® Unitherm® Steel S-60  
30371890  
2021.05, ver. 02

## FULL CE MARKING

 21	
Sika Service AG	
DoP no. 30371890	
EAD 350402-00-1106; ETA 20/1161:2020	
Notified Body 0761, 1396	
Reactive Coating for the Fire Protection of Steel Elements	
Reaction to fire	Class E
Fire resistance	(R15 to R60) - IncSlow (I/H Beams and Columns as well as Hollow Columns)
Release of dangerous substances	Product specification doesn't contain dangerous substances given in Annex XVII of REACH and the ECHA Candidate List of Substances of Very High Concern
Adhesion and Durability	<ul style="list-style-type: none"><li>• Primer and top coat compatibility</li><li>• Type X durability</li><li>• Type Y durability</li><li>• Type Z<sub>1</sub> durability</li><li>• Type Z<sub>2</sub> durability</li></ul>
Identification	Thermoanalytical analyses (TG) and Infrared spectroscopy analyses (IR)

<http://dop.sika.com>

### Declaration of Performance

Sika® Unitherm® Steel S-60  
30371890  
2021.05, ver. 02

---

## **ECOLOGY, HEALTH AND SAFETY INFORMATION (REACH)**

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety related data.

---

### **LEGAL NOTE**

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the products suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

---

#### **Declaration of Performance**

Sika® Unitherm® Steel S-60  
30371890  
2021.05, ver. 02

**Sika Deutschland GmbH**  
Industrial Coatings  
Rieter Tal  
71665 Vaihingen/Enz  
Germany  
[www.sika.com](http://www.sika.com)

**Declaration of Performance**  
Sika® Unitherm® Steel S-60  
30371890  
2021.05, ver. 02

