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designated according to Article 29 of the Regulation (EU) No 305/2011 and member of EOTA (European Organisation for Technical Assessment, www.eota.eu)

## European Technical Assessment

**ETA 16/0487  
of 16/04/2019**

**Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: UL International (UK) Ltd**

**Trade name of the construction product**

MULCOL® MULTISEALANT A

**Product family to which the construction product belongs**

Fire Stopping and Sealing Product:  
 • Linear Joint and Gap Seals

**Manufacturer**

Mulcol International BV  
 Arnesteinweg 18  
 4338 PD Middelburg  
 The Netherlands



**Manufacturing plant(s)**

A/003

**This European Technical Assessment contains**

21 pages including 1 Annex which forms an integral part of this assessment.

**This European Technical Assessment is issued in accordance with regulation (EU) No 305/2011, on the basis of**

EAD 350454-00-1106, september 2017

**This version replaces**

ETA 16/0487 dated 30/06/2016

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## I. SPECIFIC PARTS OF THE EUROPEAN TECHNICAL ASSESSMENT

### 1 Technical description of the product

- 1) Mulcol® Multisealant A is a sealant used to form linear gap seals where gaps are present in wall and floor constructions and linear joint seals where wall and floor constructions abut.
- 2) The Mulcol® Multisealant A is supplied in liquid form contained within 310 ml cartridges or 600 ml foils. The sealant is gunned into the aperture in the separating element/elements, to a specified depth utilising mineral fibre insulation backing material.
- 3) Mulcol® Multisealant A contains no carcinogenic substances or mutagenic substances, flame retardants or antimicrobiological agents.
- 4) The applicant has submitted a written declaration that Mulcol® Multisealant A does not contain substances which have to be classified as dangerous according to Directive 67/548/EEC and Regulation (EC) No 1272/2008 and listed in the "Indicative list on dangerous substances" of the EGDS - taking into account the installation conditions of the construction product and the release scenarios resulting from there.

In addition to the specific clauses relating to dangerous substances contained in this European technical Assessment, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the Construction Products Regulation, these requirements need also to be complied with, when and where they apply.

- 5) The use category of Mulcol® Multisealant A in relation to BWR 3 (Hygiene, health and environment) is IA1, S/W3

### 2 Specification of the intended uses of the product in accordance with the applicable European Assessment Document (Hereinafter EAD): EAD 350454-00-1106

Detailed information and data is given in Annex A.

The intended use of Mulcol® Multisealant A is to reinstate the fire resistance performance of gaps in and joints in and between flexible wall and rigid wall constructions, gaps in and joints between rigid floor constructions.

- 1) The specific elements of construction that Mulcol® Multisealant A may be used to provide a gap or joint seal in, are as follows:

Flexible walls:	The wall must have a minimum thickness of 75 mm and comprise steel studs lined on both faces with minimum 1 layers of 12.5 mm thick boards.
Rigid walls:	The wall must have a minimum thickness of 75 mm and comprise concrete, aerated concrete or masonry, with a minimum density of 650 kg/m <sup>3</sup> .
Rigid floors:	The floor must have a minimum thickness of 150 mm and comprise aerated concrete or concrete with a minimum density of 650 kg/m <sup>3</sup> .

The supporting construction must be classified in accordance with EN 13501-2 for the required fire resistance period.

- 2) Mulcol® Multisealant A may be used to provide a linear joint or gap seal with specific supporting constructions and substrates (for details see Annex A).
- 3) The maximum permitted joint/gap width for Mulcol® Multisealant A is 100 mm.

- 4) The maximum movement capability of Mulcol® Multisealant A is  $\leq 7.5\%$
- 5) The provisions made in this European Technical Assessment are based on an assumed working life of the Mulcol® Multisealant A of 30 years, provided that the conditions laid down in sections 4.2/5.1/5.2 for the packaging/transport/ storage/installation/use/repair are met. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.
- 6) Type Z<sub>2</sub>: Intended for uses in internal conditions with humidity lower than 85% RH excluding temperatures below 0°C, without exposure to rain or UV.

### 3 Performance of the product and references to the methods used for its assessment

Product-type: Sealant		Intended use: Linear Joint & Gap Seal
Basic requirement for construction work	Essential characteristic	Performance
<b>BWR 2 Safety in case of fire</b>		
EN 13501-1	Reaction to fire	Class D-s1, d1
EN 13501-2	Resistance to fire	Annex A
<b>BWR 3 Hygiene, health and environment</b>		
EN 1026:2000	Air permeability	No performance determined
EAD 350454-00-1106, Annex C	Water permeability	No performance determined
Declaration of manufacturer	Content, emission and/or release of dangerous substances	Declaration of manufacturer
<b>BWR 4 Safety in use</b>		
EOTA TR 001:2003	Mechanical resistance and stability	No performance determined
EOTA TR 001:2003	Resistance to impact/movement	No performance determined
EOTA TR 001:2003 ISO 11600	Adhesion	No performance determined
ISO 8339: 2005, ISO 9046: 2004 & ISO 7389	Durability and serviceability	Z <sub>2</sub>
<b>BWR 5 Protection against noise</b>		
EN 10140-2/ EN ISO 717-1	Airborne sound insulation	Rw(C;Ctr)= 62 (-1;-5) dB*
EN 10140-3/ EN ISO 717-2	Impact sound insulation	No performance determined
<b>BWR 6 Energy economy and heat retention</b>		
EN 12664, EN 12667 or EN 12939	Thermal properties	No performance determined
EN ISO 12572 EN 12086	Water vapour permeability	No performance determined

\* At 12 mm depth

**4 ASSESSMENT AND VERIFICATION OF CONSTANCY OF PERFORMANCE (HEREINAFTER AVCP) SYSTEM APPLIED, WITH REFERENCE TO ITS LEGAL BASE**

According to the decision 1999/454/EC – Commission Decision of date 22nd June 1999 on on the procedure for attesting the conformity of construction products pursuant to Article 20(2) of Council Directive 89/106/EEC as regards fire stopping, fire sealing and fire protective products, published in the Official Journal of the European Union (OJEU) L178/52 of 14/07/1999, see <http://eur-lex.europa.eu/JOIndex.do> of the European Commission<sup>1</sup>, as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) given in the following table(s) applies (apply).

Product(s)	Intended use(s)	Level(s) or class(es)	System(s)
Fire stopping and Fire Sealing Products	For fire compartmentation and/or fire protection or fire performance	Any	1

**5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

Tasks of the manufacturer:

Factory production control

The manufacturer shall exercise permanent internal control of production. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures, including records of results performed. This production control system shall ensure that the product is in conformity with this European technical Assessment.

The manufacturer may only use initial / raw / constituent materials stated in the technical documentation of this European Technical Assessment.

The factory production control shall be in accordance with the Control Plan of 8<sup>th</sup> April 2013 relating to the European technical assessment ETA 16/0487 issued on 16/04/2019 which is part of the technical documentation of this European technical assessment. The "Control Plan" is laid down in the context of the factory production control system operated by the manufacturer and deposited at UL International (UK) Ltd.

The results of factory production control shall be recorded and evaluated in accordance with the provisions of the Control Plan.

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<sup>1</sup> Official Journal of the European Communities L178/52 of 14/7/1999

Other tasks of the manufacturer

Additional information

The manufacturer shall provide a technical data sheet and an installation instruction with the following minimum information:

(a) Technical data sheet:

- Field of application:
- Building elements for which the linear joint seal is suitable, type and properties of the building elements like minimum thickness, density, and - in case of lightweight constructions – the construction requirements.
- Limits in size, minimum thickness etc. of the joint seal
- Construction of the linear joint seal including the necessary components and additional products (e.g. backfilling material) with clear indication whether they are generic or specific.

(b) Installation instruction:

- Steps to be followed
- Procedure in case of retrofitting
- Stipulations on maintenance, repair and replacement

**6 Issued on:**

**16<sup>th</sup> April 2019**

Report by:



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Staff Engineer  
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Reviewed by:



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Building and Life Safety Technologies

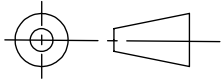
**For and on behalf of UL International (UK) Ltd.**

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint seals  
Mulcol® Multisealant A  
Flexible wall construction according to I.2.2



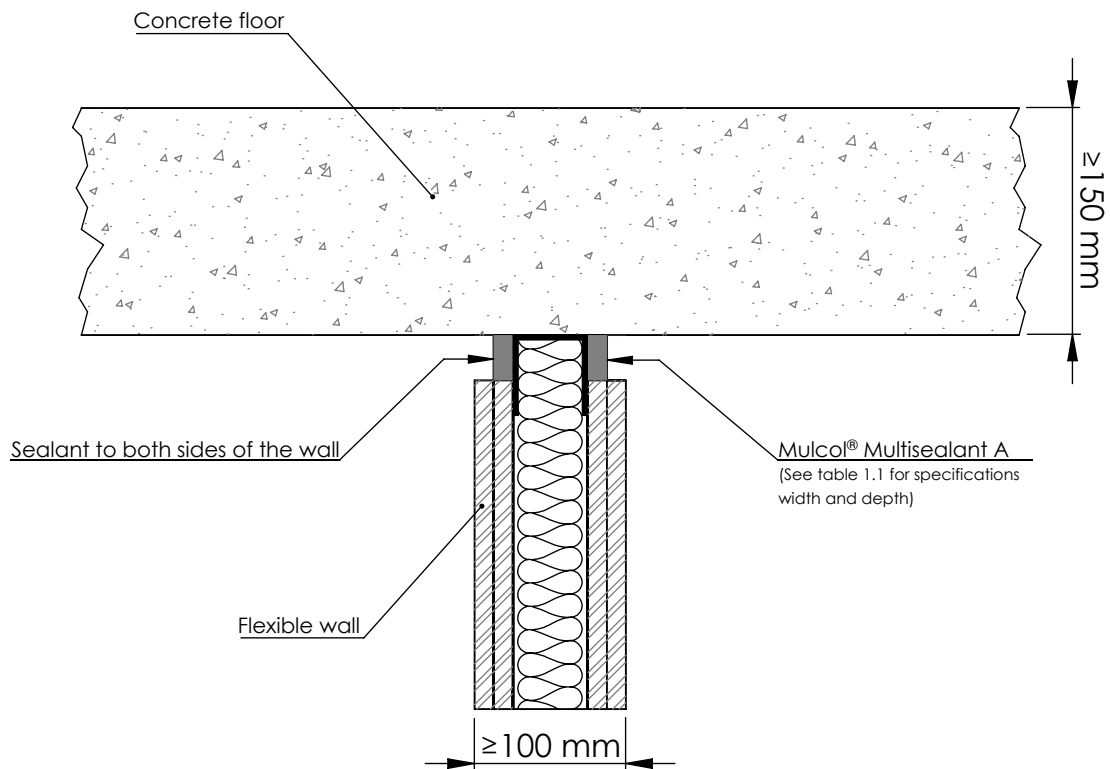
American projection



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Unit of measure : mm  
Date : 15-10-2017

Company : Mulcol International B.V.  
Department : Research & Development  
Draftsman : K.J.

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### A 1.1 Linear joint seals, between head of flexible wall and soffit of concrete floor

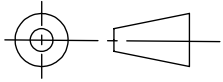
Substrate	Classification	Sealant depth	Backing	Maximum seal
Plasterboard wall / Concrete floor	EI 90 - T - X - F - W 25	12,5 mm	50 mm steel partition head track	25 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint seals  
 Mulcol® Multisealant A  
 Flexible wall construction according to I.2.1



American projection

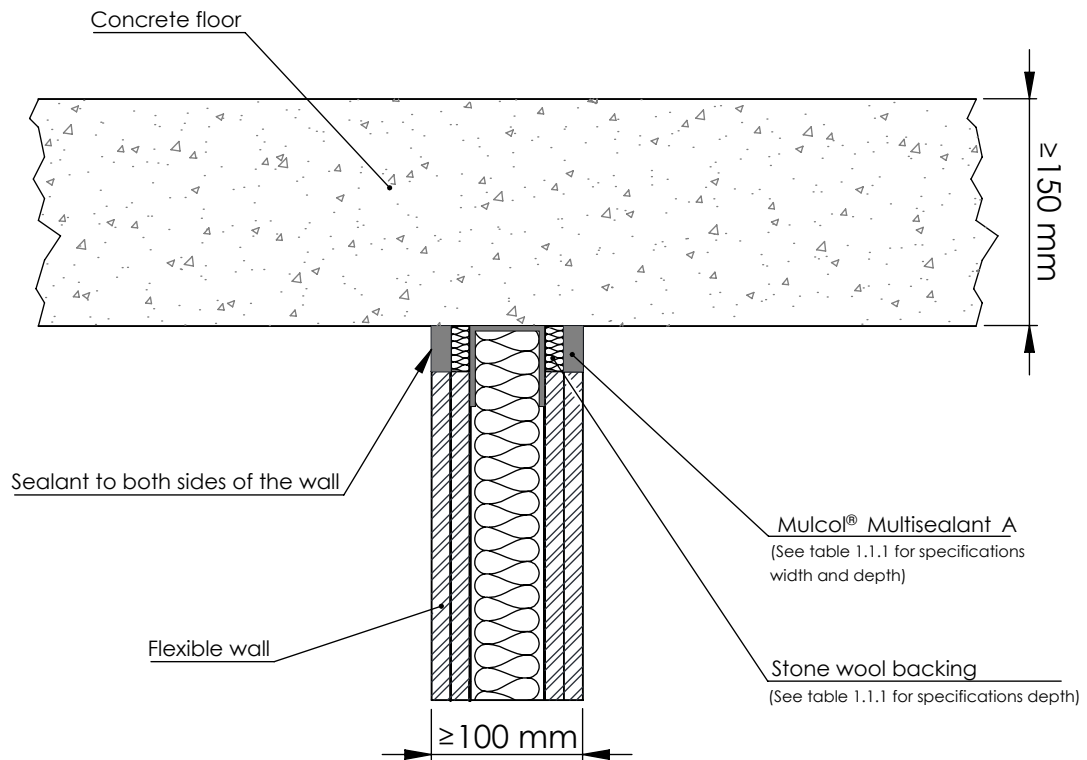


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Company : Mulcol International B.V.  
 Department : Research & Development  
 Draftsman : R.M.

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## A 1.1.1 Linear joint seals, between head of flexible wall and soffit of concrete floor

Substrate	Classification	Sealant depth	Backing	Maximum seal
Plasterboard wall / Concrete floor	EI 120 - T - X - F - W 00 to 30	12.5 mm	12.5 mm Stone wool insulation, 35 kg/m <sup>3</sup> plus 50 mm steel partition head track	30 mm

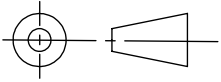


# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint seals  
 Mulcol® Multisealant A  
 Flexible wall construction according to I.2.1



American projection

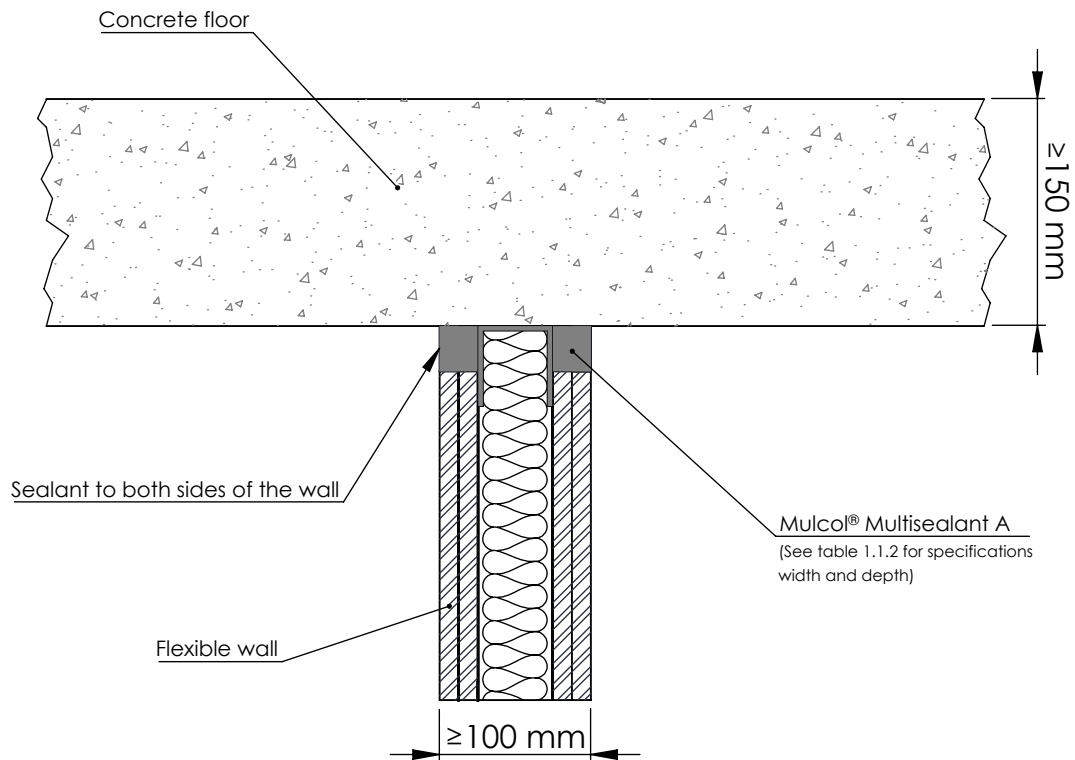


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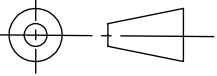
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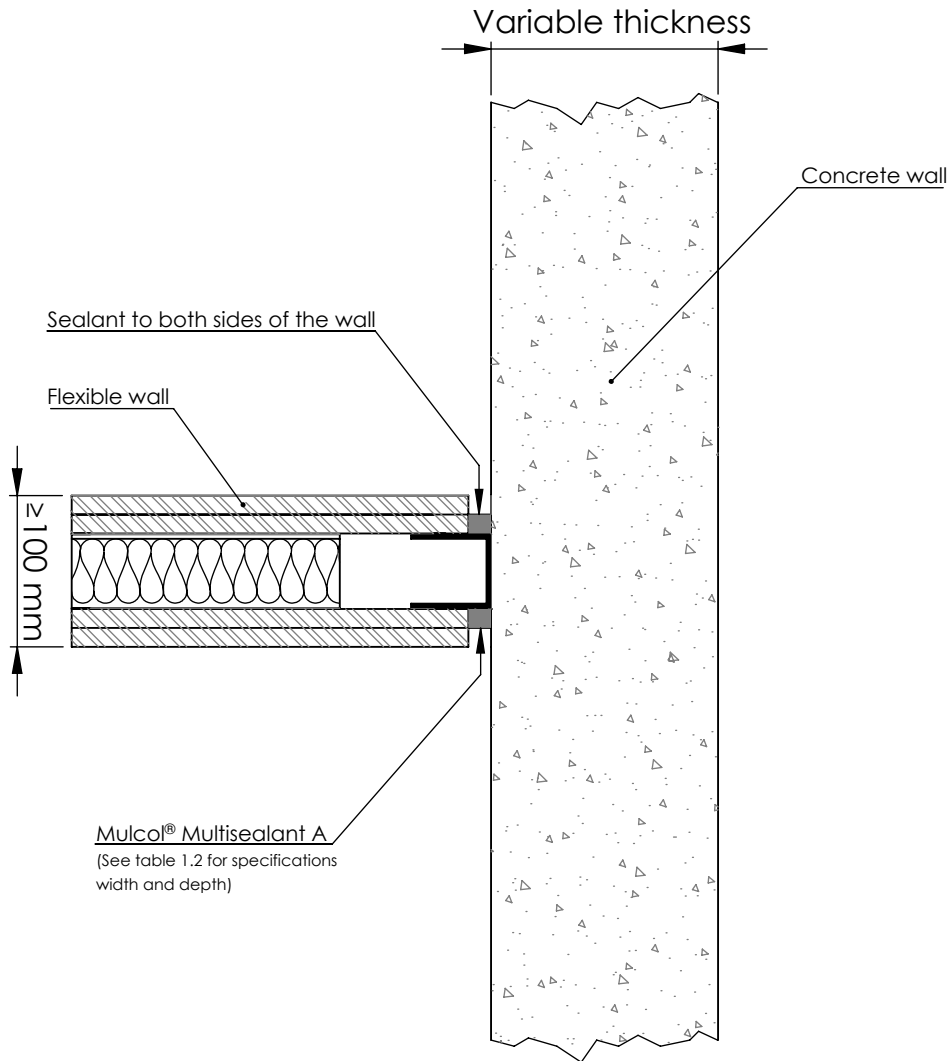


## A 1.1.2 Linear joint seals, between head of flexible wall and soffit of concrete floor

Substrate	Classification	Sealant depth	Backing	Maximum seal
Plasterboard wall / Concrete floor	EI 120 - T - X - F - W 00 to 30	25 mm	50 mm steel partition head track	30 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint seals Mulcol® Multisealant A Flexible wall construction according to I.2.2			
American projection 	Scale : 1:5	Company : Mulcol International B.V.	FW-JNT-MSA2.2.2
	Unit of measure : mm	Department : Research & Development	
	Date : 15-10-2017	Draftsman : K.J.	A4



## A 1.2 Linear joint seals, between vertical end of flexible wall and concrete wall

Substrate	Classification	Sealant depth	Backing	Maximum seal
Plasterboard wall / Concrete wall	EI 90 - V - X - F - W 15	12.5 mm	50 mm steel partition head track	15 mm

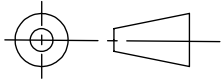
# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint seals  
Mulcol® Multisealant A

Flexible wall construction according to I.2.1



American projection

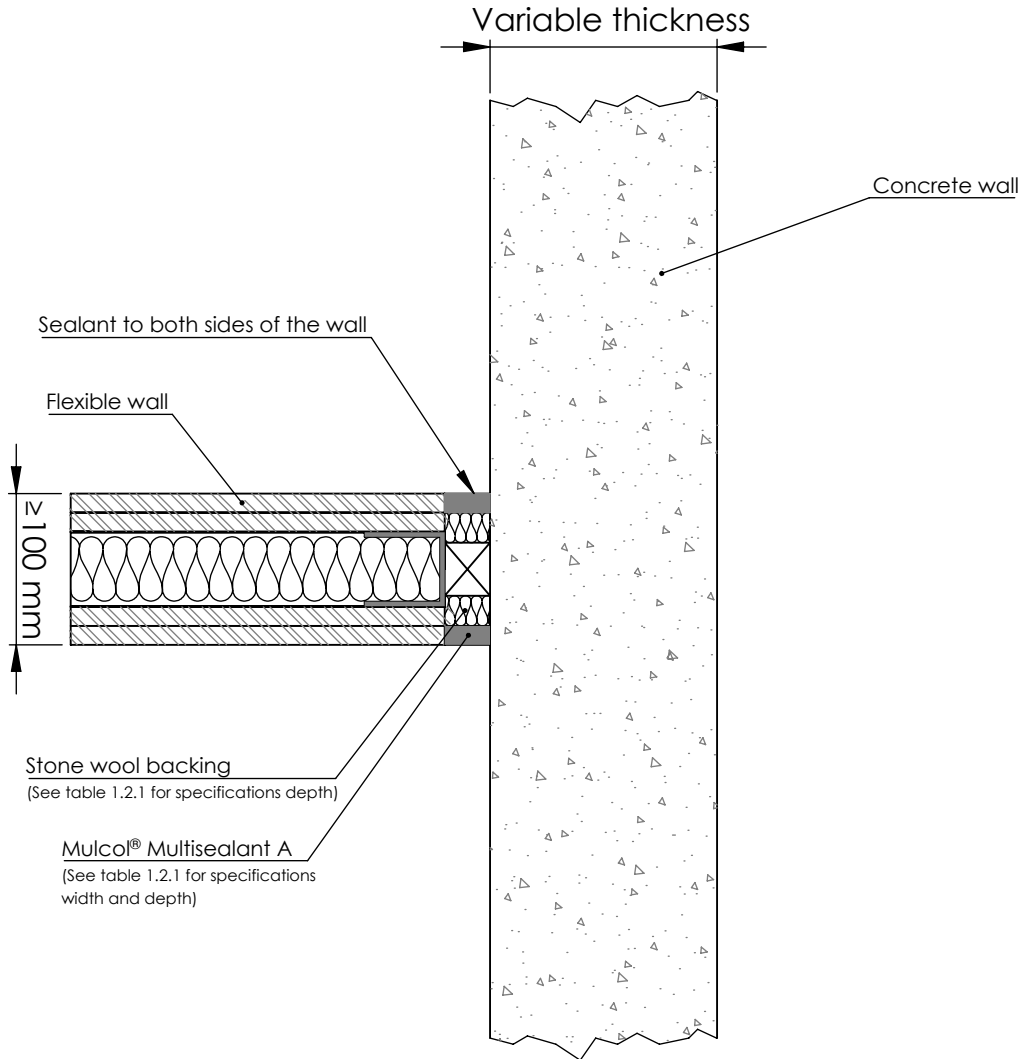


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Company : Mulcol International B.V.  
Department : Research & Development  
Draftsman : R.M.

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## A 1.2.1 Linear joint seals, between vertical end of flexible wall and concrete wall

Substrate	Classification	Sealant depth	Backing	Maximum seal
Plasterboard wall* / Concrete wall	EI 120 - V - X - F - W 00 to 30	12.5 mm	20 mm Stone wool insulation, 35 kg/m <sup>3</sup>	30 mm

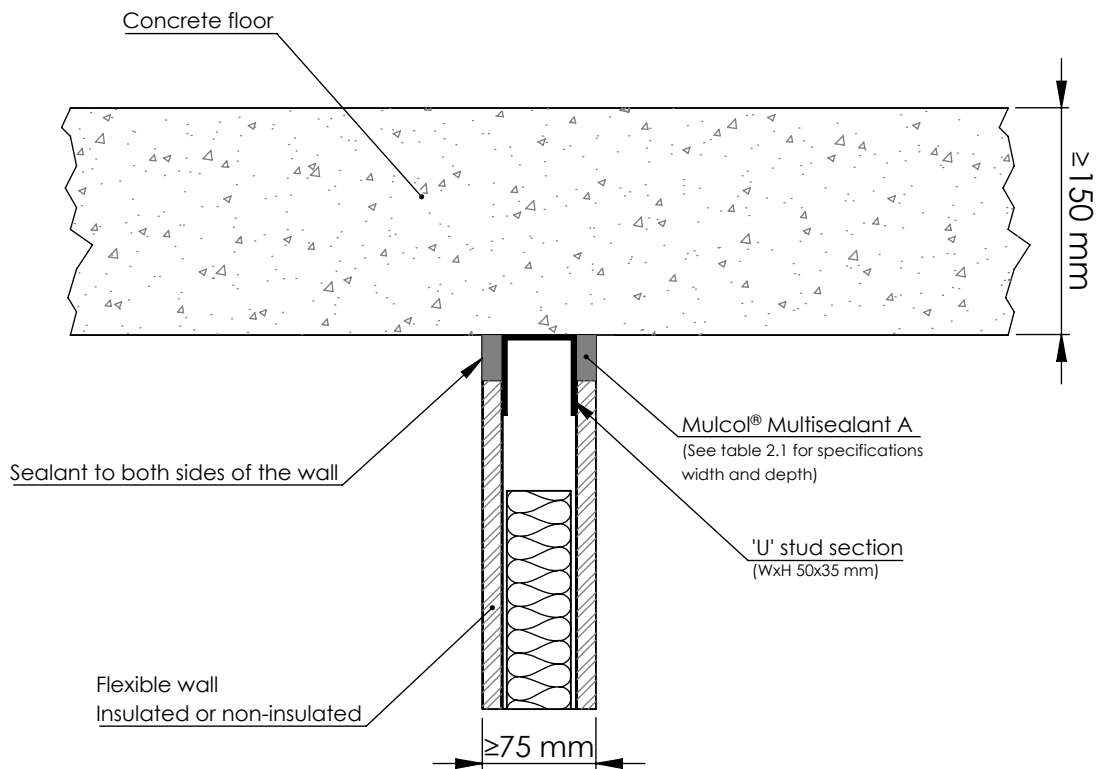
\*Maximum partition/wall height of 3 metres

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint seals  
 Mulcol® Multisealant A  
 Flexible wall construction according to I.2.2




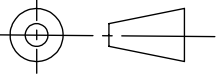
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	Date : 15-10-2017	Draftsman : K.J.	A4

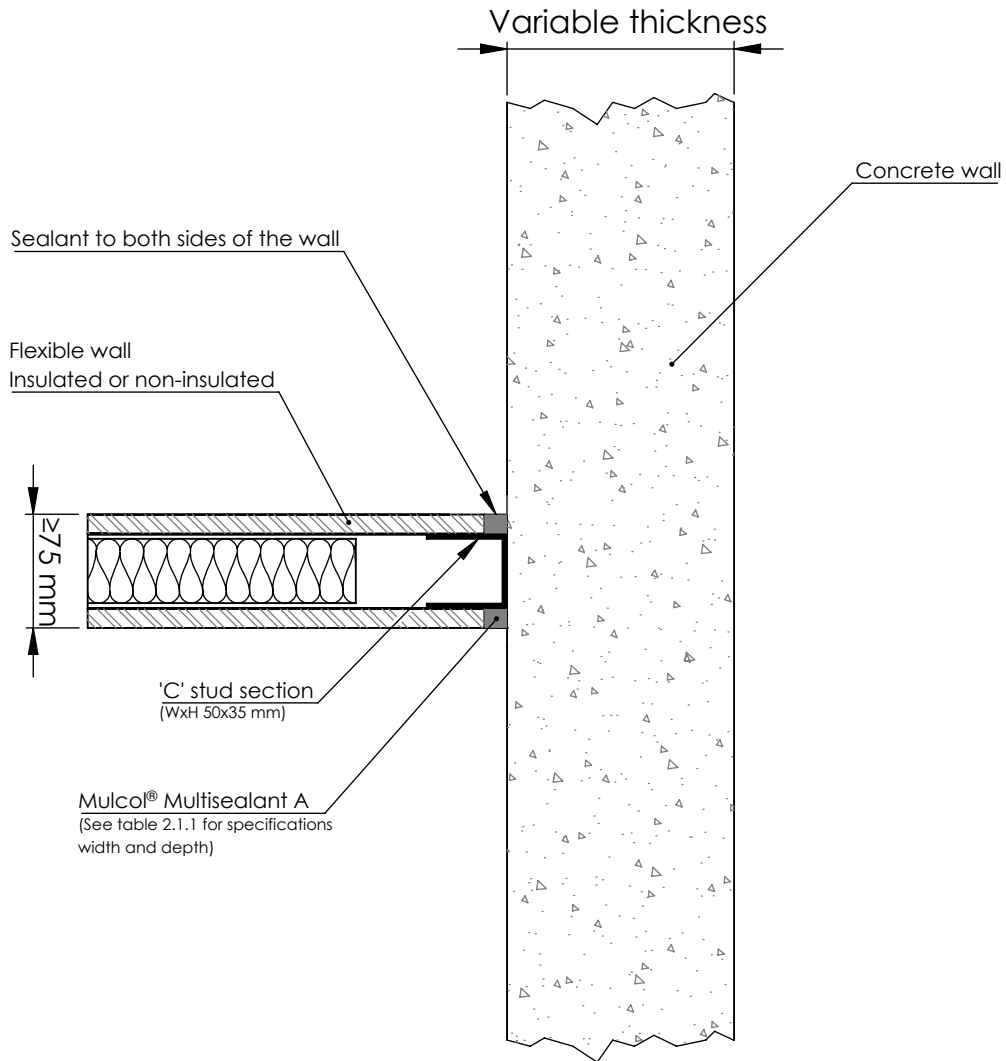


## A 2.1 Linear joint seals, between head of flexible wall and soffit of concrete floor

Substrate	Classification	Sealant depth	Backing	Maximum seal
Plasterboard wall / Concrete floor	E 60 - T - X - F - W 25 EI 45 - T - X - F - W 25	12.5 mm	50 mm steel partition head track	25 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint seals Mulcol® Multisealant A Flexible wall construction according to I.2.2			
American projection 	Scale : 1:5	Company : Mulcol International B.V.	FW-JNT-MSA2.2.2
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## A 2.2 Linear joint seals, between vertical end of flexible wall and concrete wall

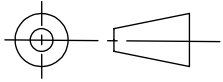
Substrate	Classification	Sealant depth	Backing	Maximum seal
Plasterboard wall / Concrete wall	E 60 - V - X - F - W 15 EI 45 - V - X - F - W 15	12.5 mm	50 mm steel partition head track	15 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint or gap seal  
 Mulcol® Multisealant A  
 Rigid wall construction according to I.2.1



American projection

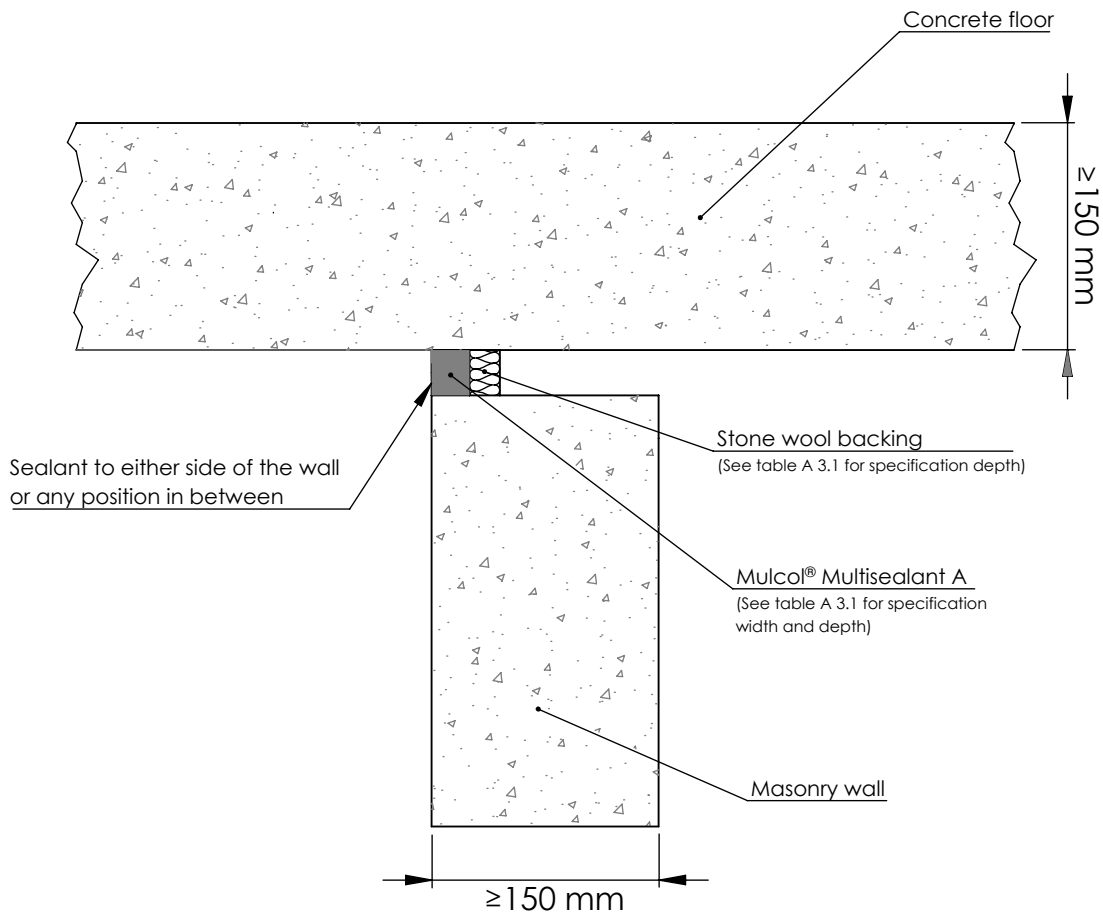


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### A 3.1 Linear joint or gap seal, between head of masonry wall and soffit of concrete floor

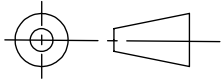
Substrate	Classification	Sealant depth	Backing	Maximum seal
Masonry wall to Concrete floor	E 240 - T - X - F - W 00 to 30 EI 60 - T - X - F - W 00 to 30	25 mm	20 mm Stone wool insulation, 40 kg/m <sup>3</sup>	30 mm
Masonry wall to Concrete floor	E 240 - T - X - F - W 50 EI 60 - T - X - F - W 50	10 mm	60 mm Stone wool insulation, 33 kg/m <sup>3</sup>	50 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint or gap seal  
 Mulcol® Multisealant A  
 Rigid wall construction according to I.2.1



American projection

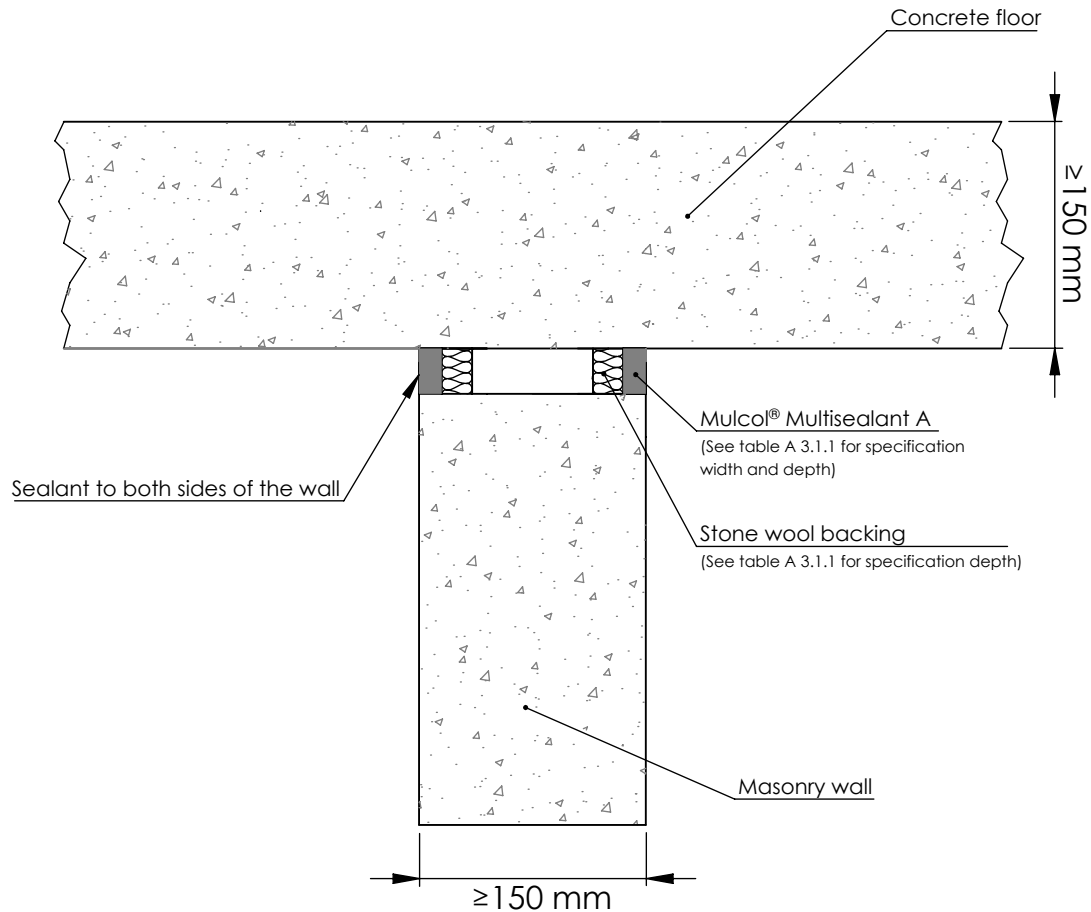


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## A 3.1.1 Linear joint or gap seal, between head of masonry wall and soffit of concrete floor

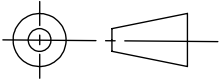
Substrate	Classification	Sealant depth	Backing	Maximum seal
Masonry wall / Concrete floor	EI 240 - T - X - F - W 00 to 30	15 mm	20 mm Stone wool insulation, 40 kg/m <sup>3</sup>	30 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint or gap seal  
 Mulcol® Multisealant A  
 Rigid wall construction according to I.2.1



American projection

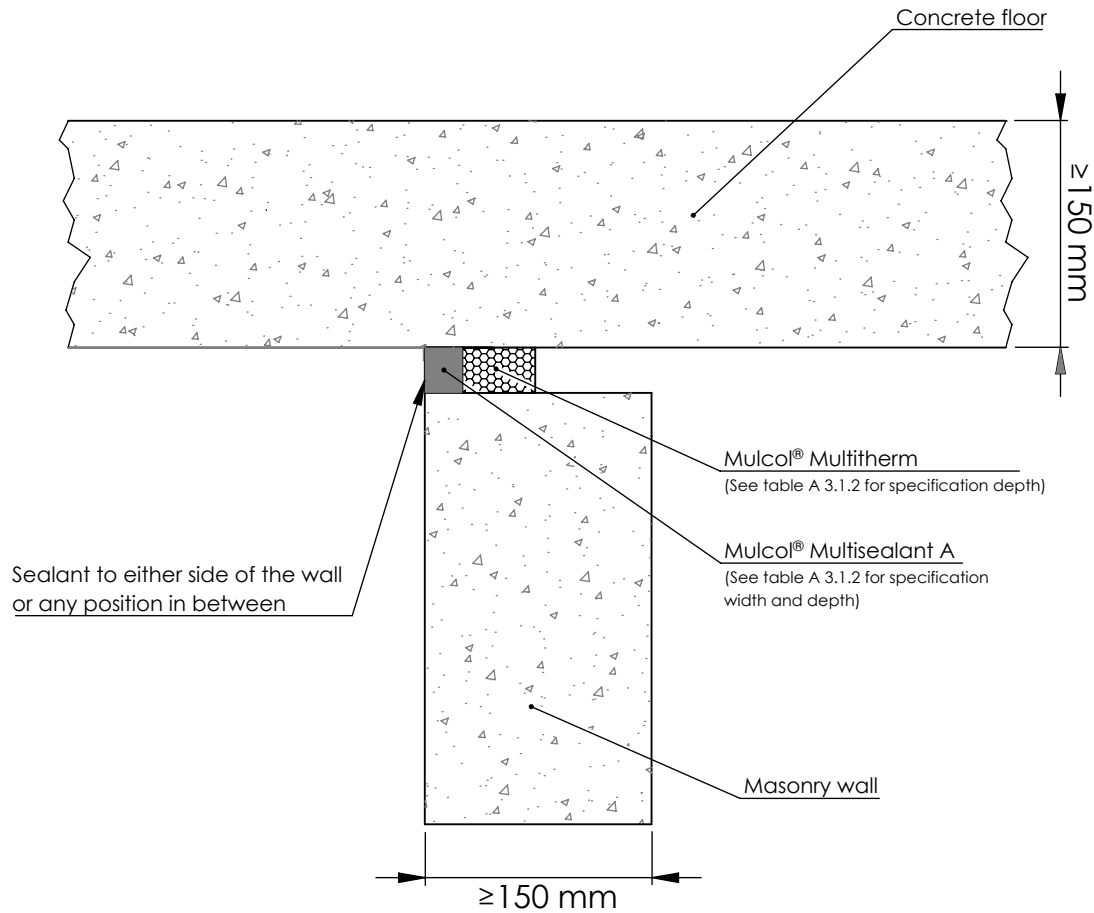


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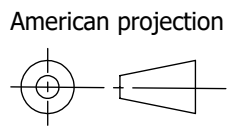
## A 3.1.2 Linear joint or gap seal, between head of masonry wall and soffit of concrete floor

Substrate	Classification	Sealant depth	Backing	Maximum seal
Masonry wall / Concrete floor	E 240 - T - X - F - W 00 to 30 EI 120 - T - X - F - W 00 to 30	25 mm	48 mm Mulcol® Multitherm Backing	30 mm



# Annex A - Resistance to fire classification - Mulcol® Multisealant A

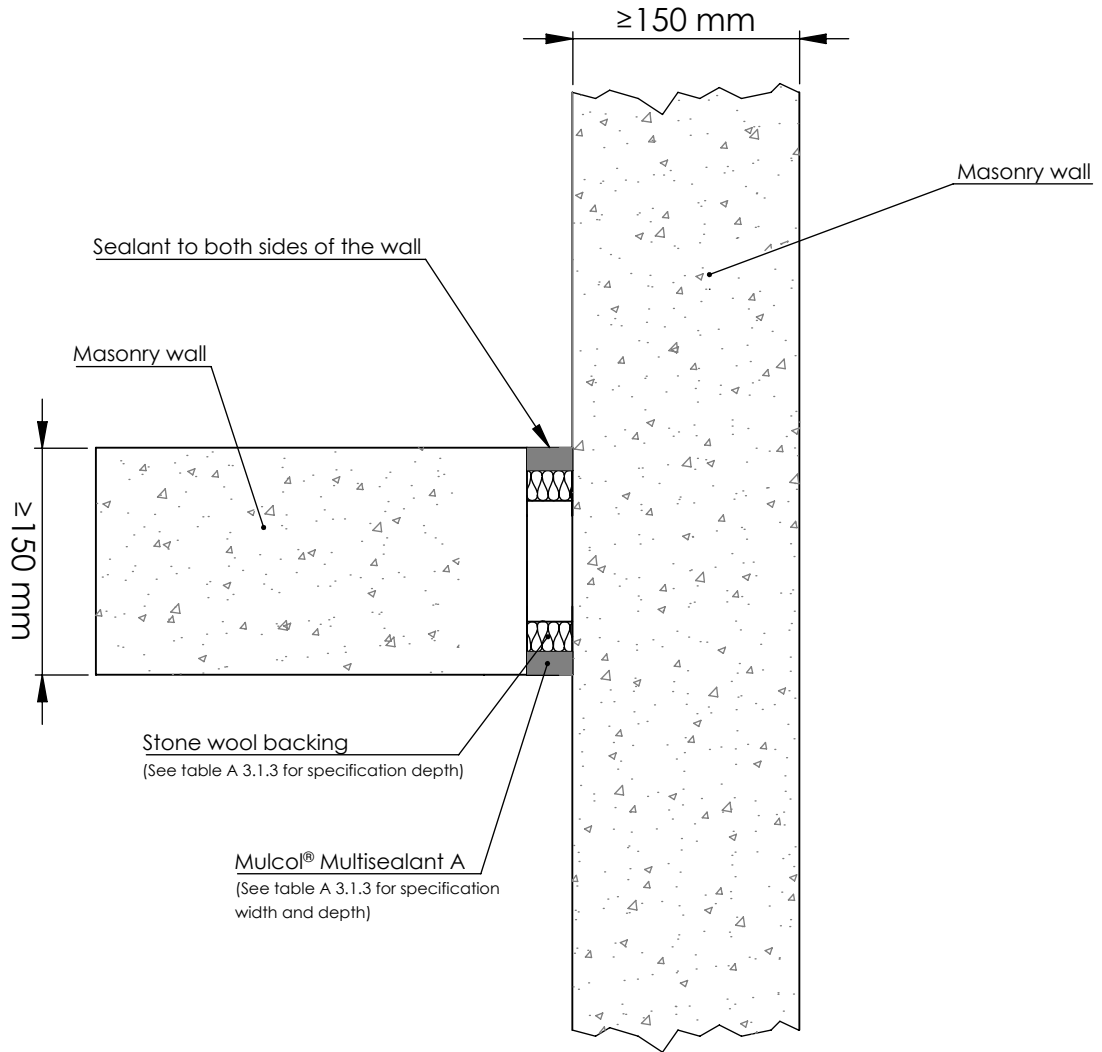
Linear joint or gap seal  
 Mulcol® Multisealant A  
 Rigid wall construction according to I.2.1



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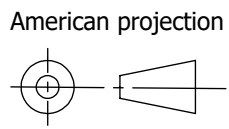


## A 3.2 Linear joint or gap seal, between vertical end of masonry wall and masonry wall

Substrate	Classification	Sealant depth	Backing	Maximum seal
Masonry wall / Masonry or concrete wall	EI 240 - V - X - F - W 00 to 30	15 mm	20 mm Stone wool insulation, 40 kg/m <sup>3</sup>	30 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

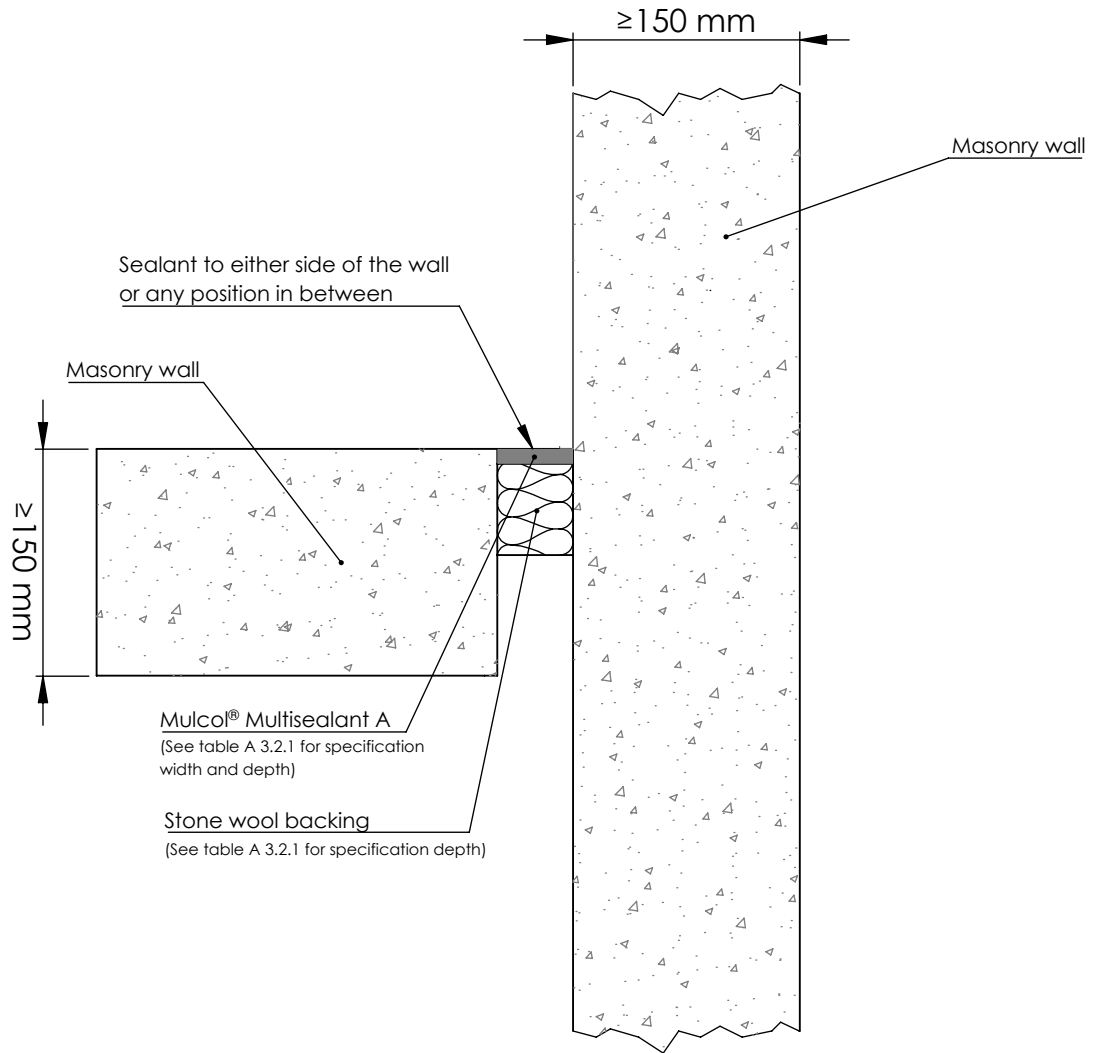
Linear joint or gap seal  
 Mulcol® Multisealant A  
 Rigid wall construction according to I.2.1



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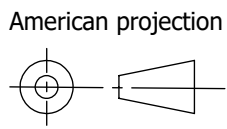


## A 3.2.1 Linear joint or gap seal, between vertical end off masonry wall and masonry wall

Substrate	Classification	Sealant depth	Backing	Maximum seal
Masonry wall / Masonry or concrete wall	EI 120 - V - X - F - W 50	10 mm	60 mm Stone wool insulation, 33 kg/m <sup>3</sup>	50 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

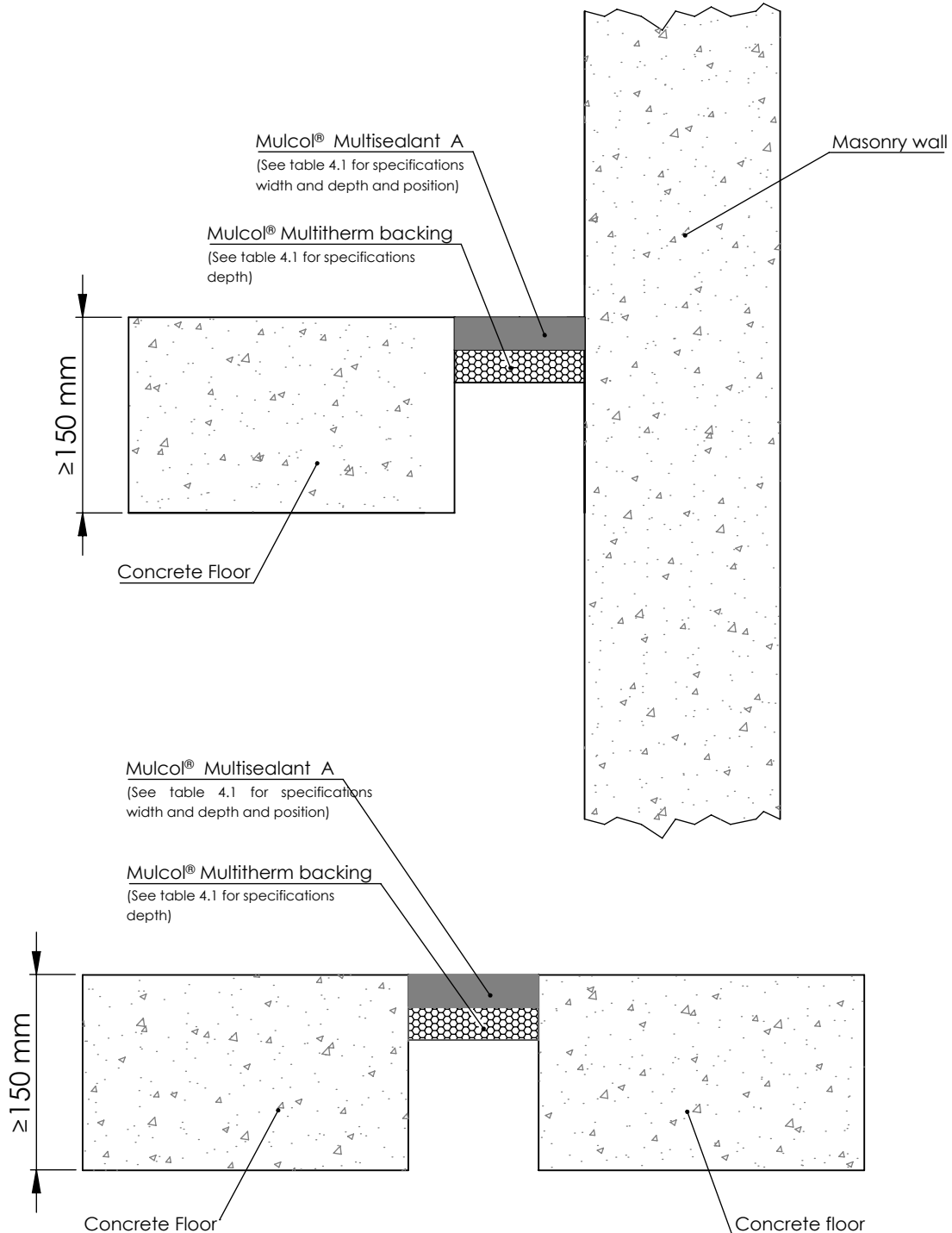
Linear joint or gap seals  
Mulcol® Multisealant A  
Rigid floor construction according to I.2.1



Scale : 1:5  
Unit of measure : mm  
Date : 15-2-2017

Company : Mulcol International B.V.  
Department : Research & Development  
Draftsman : R.M.

RF-JNT-MSA1.5.2  
A4



### A 4.1 Linear joint or gap seal, between floor slabs or between floor slab and wall

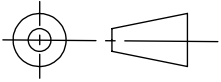
Substrate	Classification	Sealant depth	Backing	Maximum seal
Concrete floor / Concrete floor	E 120 - H - X - F - W 00 to 100 EI 60 - H - X - F W 00 to 100	25 mm (any position)	25 mm Mulcol® Multitherm Backing	100 mm
Concrete floor / Masonry wall	EI 180 - H - X - F - W 00 to 100	25 mm (Top face)	25 mm Mulcol® Multitherm Backing	100 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint or gap seals  
 Mulcol® Multisealant A  
 Rigid floor construction according to I.2.1



American projection

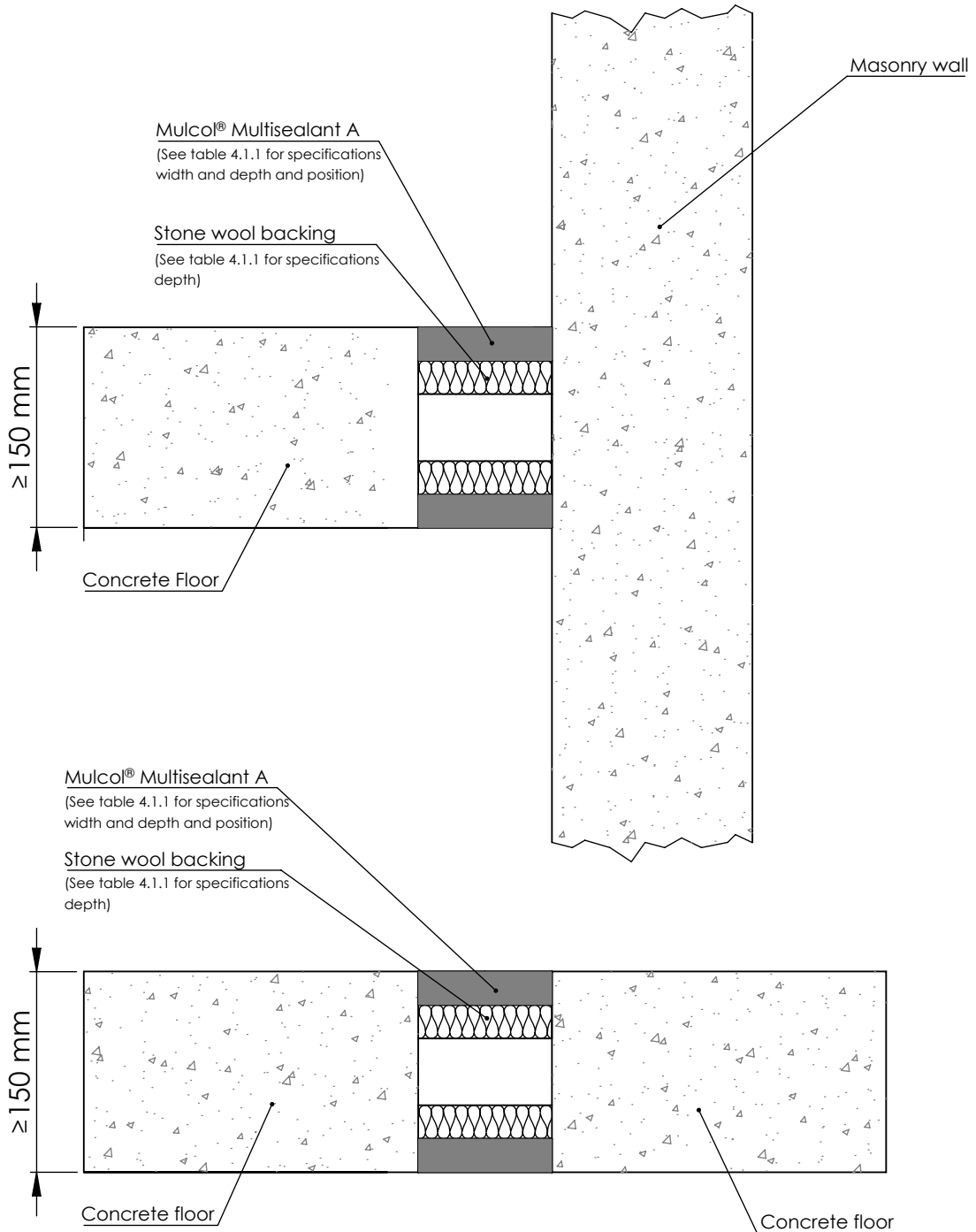


Scale : 1:5  
 Unit of measure : mm  
 Date : 15-2-2017

Company : Mulcol International B.V.  
 Department : Research & Development  
 Draftsman : R.M.

RF-JNT-MSA2.5.2

A4



## A 4.1.1 Linear joint or gap seal, between floor slabs or between floor slab and wall

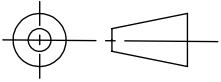
Substrate	Classification	Sealant depth	Backing	Maximum seal
Concrete floor / concrete floor or masonry wall	EI 120 - H - X - F - W 00 to 100	15 mm (Both sides)	25 mm Stone wool insulation, 40 kg/m <sup>3</sup>	100 mm
Concrete floor / concrete floor or masonry wall	EI 180 - H - X - F - W 00 to 100	15 mm (Both sides)	25 mm Stone wool insulation, 140 kg/m <sup>3</sup>	100 mm
Concrete floor / concrete floor or masonry wall	EI 240 - H - X - F - W 00 to 30	15 mm (Both sides)	25 mm Stone wool insulation, 35 kg/m <sup>3</sup>	30 mm

# Annex A - Resistance to fire classification - Mulcol® Multisealant A

Linear joint or gap seals  
 Mulcol® Multisealant A  
 Rigid floor construction according to I.2.1



American projection

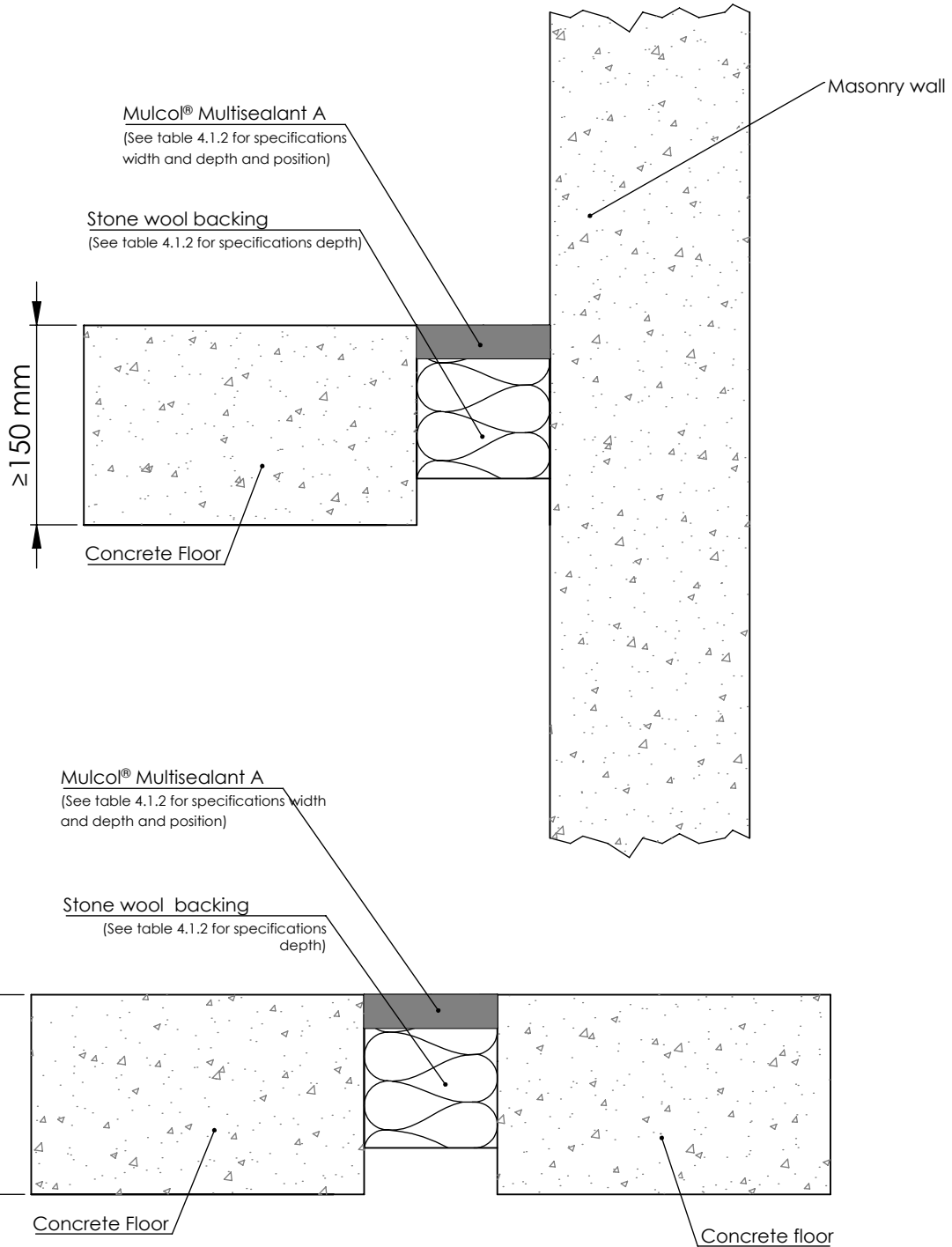


Scale : 1:5  
 Unit of measure : mm  
 Date : 15-2-2017

Company : Mulcol International B.V.  
 Department : Research & Development  
 Draftsman : R.M.

RF-JNT-MSA1.5.2

A4



## A 4.1.2 Linear joint or gap seal, between floor slabs or between floor slab and wall

Substrate	Classification	Sealant depth	Backing	Maximum seal
Concrete floor / concrete floor or masonry wall	EI 240 - H - X - F - W 100	10 mm (Top face)	90 mm Stone wool insulation 33 kg/m <sup>3</sup>	100 mm