SpECseal 625HD

TWO PART, GUN GRADE POLYSULPHIDE JOINT SEALANT

DESCRIPTION

SpECseal 625HD is a two part, low modulus, chemically curing gun grade polysulphide joint sealant developed specifically for dynamic joints. It is based on a liquid polysulphide polymer which when mixed with the hardener, cures to form a tough rubber like seal.

TYPICAL USES

For sealing and resealing high movement joints in building and civil engineering structures and for sealing joints in structures which are subject to high rapid movements.

ADVANTAGES

- Tough and resilient seal
- Provides permanent and uniform water tight seal
- Excellent adhesion to most surfaces
- Stays flexible - no brittle or cracking due to UV exposure
- Gun grade for vertical and overhead applications
- Good chemical & weathering resistance
- Non-toxic once cured
- High resistance to ageing

TECHNICAL DATA

Typical Properties @ 20±3 °C

Movement accommodation factor (ASTM C 719)	25% for butt joints
Pot life	1 hour
Tack-free	6 hours
Full cure time	7 days
Hardness (Shore 'A')	20 ± 5 @ 7 days
Appearance after curing	rubber like solid
Pull-off strength	0.86 N/mm²
Tensile strength	0.35 N/mm²
Elongation @ break	1080%
Volume shrinkage	0.4%
Effect of heat ageing	1.14%
Solids content	100%
VOC	1.29 g/l
Specific gravity	1.70 ± 0.05
Mixing ratio by weight (Packed as a one component product)	
Part A	100.00
Part B	5.60
Inert layer	3.17
Colour	Grey
Service Temperature	-20°C to +85°C

CHEMICAL RESISTANCE

Resistance to UV & Ozone	Excellent
Resistance to staining	Excellent
Suphuric acid	Good
Hydrochloric acid	Good
Nitric acid	Good
Sodium hydroxide	Good
Calcium hydroxide	Good
Ammonium hydroxide	Good
Fuels (solvents)	Good
Oil	Good
Sewage water	Good
Subkha sand	Good

DESIGN IMPLICATIONS

The width of the joint sealant should be a minimum of four times the anticipated movement. Joints with cyclic movement should have a width to depth ratio of 2:1 but minimum depth of the sealant should be maintained as recommended:

- 10mm for all porous surface
- 20mm for joints exposed to traffic and hydrostatic pressure
- 5mm for impervious surface such as metals, glass, etc.

APPLICATION

Joint Preparation

The joint surface must be clean, dry and free from oil, loose mortar, laitance, release agents and other contaminants. A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required

to exposed clean, sound surface.

SpECseal Primer 25 for use on porous and non-porous surfaces.

SpECseal Primer 25 is a two component primer. The base and hardener components should be mixed together for 2 minutes to produce a uniform consistency.

The primer should be applied to clean, dry surfaces prior to the installation of backer rod or bond breaker tape.

The freshly mixed **SpECseal 625HD** should be applied after the primer is just touch dry. The sealant should be applied between 30 - 180 minutes after priming.

If the primer is left to dry longer than 3 hours the surfaces must be re-primed prior to applying the sealant.

SpECcord or **SpECcell Polyethylene** should be used to control the depth of the joint to the recommended thickness. Where joint design or depth of joint will not permit the use of backing rod, use a bond breaker tape over the cut back joint filler.

Mixing

SpECseal 625HD is the gun grade and is supplied in 2.5 litre composite packs with the base and curing agent placed in the tin ready for mixing.

The components should be mixed for a minimum of 5 minutes to obtain a uni form colour, free from streaks. Keep scraping the inner wall of the con tainer with spatula to avoid unmixed material sticking on the wall. Mixing should take place using a slow speed drill fitted with a **SpECseal** paddle mixer.

We do not recommend part mixing.

Application

Soon after mixing, the **SpECseal 625HD** should be loaded into a **SpEC 600 ml solid barrel gun** using a steel follower plate.

The joint faces should be protected with masking tape to facilitate tooling.

SpECseal 625HD should be gun applied firmly into the joint such that it makes positive contact with the joint faces.

The sealant should then be tooled off to compact it against the joint sides and the masking tape removed immediately after tooling.

EQUIPMENT CLEANING

Clean equipment with **SpECseal Cleaning Fluid** immediately after the tooling is finished.

APPLICATION TEMPERATURE RANGE

Minimum	+5°C
Maximum	+60°C

PACKAGING & YIELD

SpECseal 625HD is supplied in 2.5 litre tins.

SpECseal Primer 25 is supplied in one litre 2 part packs.

USAGE RATES

Length of joint in metres filled/1 litre of **SpECseal 625HD.**

Depth (mm)	Width (mm)				
	10	15	20	25	30
10	10	6.7	5		
15	6.7	4.4	3.3	2.6	2.2
20	5	3.3	2.5	2.0	1.67
25		2.6	2.0	1.6	1.3

ANCILLARY MATERIALS & EQUIPMENT

SpECseal Primer 25
SpECseal Cleaning Fluid
SpECseal paddle mixer
SpECseal 600ml solid barrel gun
SpECcord closed cell polyethylene back-up cord

STORAGE & SHELF LIFE

To maintain the shelf life of 12 months, **SpECseal 625HD** should be stored in the original sealed containers at temperatures between 5°C and 25°C.

HEALTH & SAFETY

Contact with skin and eyes should be avoided. It is essential that adequate ventilation is provided and all personnel should avoid inhaling the vapours produced. If working is necessary in confined areas it is strongly recommended that sealed respiratory equipment is utilized.

Eye Contact

Rinse with copious amounts of clean water and seek medical attention.

Skin Contact

Rinse with copious amounts of clean water followed by thorough cleaning with soap and water. DO NOT USE SOLVENTS

Ingestion

Seek immediate medical attention. DO NOT INDUCE VOMITING

FLASHPOINT

SpECseal Primer 25	**48°C**
SpECseal Cleaning Fluid	**34°C**

Issue 2: 07/2022
QA-054

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SpECseal 625P

TWO PART, POURABLE GRADE POLYSULPHIDE JOINT SEALANT

DESCRIPTION

SpECseal 625P is a two part, low modulus, chemically curing pourable grade polysulphide joint sealant developed specifically for dynamic joints. It is based on a liquid polysulphide polymer which when mixed with the hardener, cures to form a tough rubber like seal.

TYPICAL USES

For sealing and resealing high movement joints in building and civil engineering structures and for sealing joints in structures which are subject to high rapid movements.

ADVANTAGES

- Tough and resilient seal
- Provides permanent and uniform water tight seal
- Excellent adhesion to most surfaces
- Stays flexible - no brittle or cracking due to UV exposure
- Pouring grade for horizontal applications
- Good chemical & weathering resistance
- Non-toxic once cured
- High resistance to ageing

TECHNICAL DATA

Typical Properties @ 20±3°C

Movement accommodation factor (ASTM C 719)	25% for butt joints
Pot life	1 hour
Tack-free	6 hours
Full cure time	7 days
Hardness (Shore 'A')	20 ± 5 @ 7 days
Appearance after curing	rubber like solid
Pull-off strength	0.86 N/mm²
Tensile strength	0.30 N/mm²
Elongation @ break	1386%
Volume shrinkage	0.4%
Effect of heat ageing	1.14%
Solids content	100%
VOC	1.29 g/l
Specific gravity	1.55 ± 0.05
Mixing ratio by weight:	
Part A	100.0
Part B	4.0
Colour	Grey
Service Temperature	-20°C to +85°C

CHEMICAL RESISTANCE

Resistance to UV & Ozone	Excellent
Resistance to staining	Excellent
Suphuric acid	Good
Hydrochloric acid	Good
Nitric acid	Good
Sodium hydroxide	Good
Calcium hydroxide	Good
Ammonium hydroxide	Good
Fuels (solvents)	Good
Oil	Good
Sewage water	Good
Subkha sand	Good

DESIGN IMPLICATIONS

The width of the joint sealant should be a minimum of four times the anticipated movement. Joints with cyclic movement should have a width to depth ratio of 2:1 but minimum depth of the sealant should be maintained as recommended:

- 10mm for all porous surface
- 20mm for joints exposed to traffic and hydrostatic pressure
- 5mm for impervious surface such as metals, glass, etc.

APPLICATION

Joint Preparation

The joint surface must be clean, dry and free from oil, loose mortar, laitance, release agents and other contaminants. A thorough wire brushing, grinding, sand blasting or solvent cleaning may be required to exposed clean, sound surface.

SpECseal Primer 25 for use on porous and non-

porous surfaces.

SpECseal Primer 25 is a two component primer. The base and hardener components should be mixed together for 2 minutes to produce a uniform consistency.

The primer should be applied to clean, dry surfaces prior to the installation of backer rod or bond breaker tape.

The freshly mixed **SpECseal 625HD** should be applied after the primer is just touch dry. The sealant should be applied between 30 to 180 minutes after priming.

If the primer is left to dry longer than 3 hours the surfaces must be re-primed prior to applying the sealant.

SpECcord or **SpECcell Polyethylene** should be used to control the depth of the joint to the recommended thickness. Where joint design or depth of joint will not permit the use of backing rod, use a bond breaker tape over the cut back joint filler.

Mixing

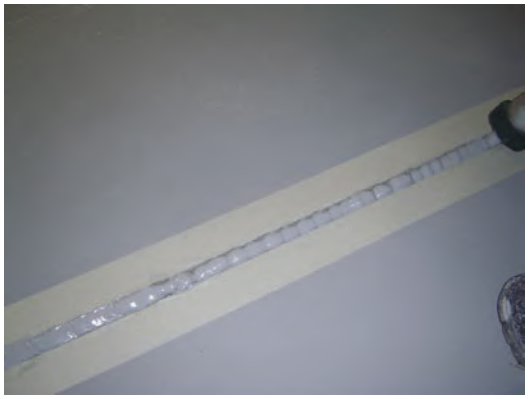
SpECseal 625P is the pouring grade and is supplied in 4 litre packs with the base and curing agent in separate tins ready for mixing.

Pour the hardener component completely into the base component container.

Mix this together for 3 - 5 minutes to obtain a uniform colour, free from streaks. Mixing should take place using a slow speed drill fitted with a **SpECseal** paddle mixer.

We do not recommend part mixing.

Application



The joint faces should be protected with masking tape to facilitate tooling.

SpECseal 625P should be poured applied firmly into the joint such that it makes positive contact with the joint faces.

The sealant should then be tooled off to compact it against the joint sides and the masking tape removed immediately after tooling.

EQUIPMENT CLEANING

Clean equipment with **SpECseal Cleaning Fluid** immediately after the tooling is finished.

APPLICATION TEMPERATURE RANGE

Minimum	+5°C
Maximum	+60°C

PACKAGING & YIELD

SpECseal 625P is supplied in 4.0 litre tins.

SpECseal Primer 25 is supplied in one litre 2 part packs.

USAGE RATES

Length of joint in metres filled/1 litre of **SpECseal 625P**

Depth (mm)	Width (mm)				
	10	15	20	25	30
10	10	6.7	5		
15	6.7	4.4	3.3	2.6	2.2
20	5	3.3	2.5	2.0	1.67
25		2.6	2.0	1.6	1.3

ANCILLARY MATERIALS & EQUIPMENT

SpECseal Primer 25
SpECseal Cleaning Fluid
SpECseal paddle mixer
SpECseal 600ml solid barrel gun
SpECcord closed cell polyethylene back-up cord

STORAGE & SHELF LIFE

To maintain the shelf life of 12 months, **SpECseal 625P** should be stored in the original sealed containers at temperatures between 5°C and 25°C.

HEALTH & SAFETY

Contact with skin and eyes should be avoided. It is essential that adequate ventilation is provided and all personnel should avoid inhaling the vapours produced. If working is necessary in confined areas it is strongly recommended that sealed respiratory equipment is utilized.

Eye Contact

Rinse with copious amounts of clean water and seek medical attention.

Skin Contact

Rinse with copious amounts of clean water followed by thorough cleaning with soap and water. DO NOT USE SOLVENTS

Ingestion

Seek immediate medical attention. DO NOT INDUCE VOMITING

FLASHPOINT

SpECseal Primer 25	**48°C**
SpECseal Cleaning Fluid	**34°C**

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