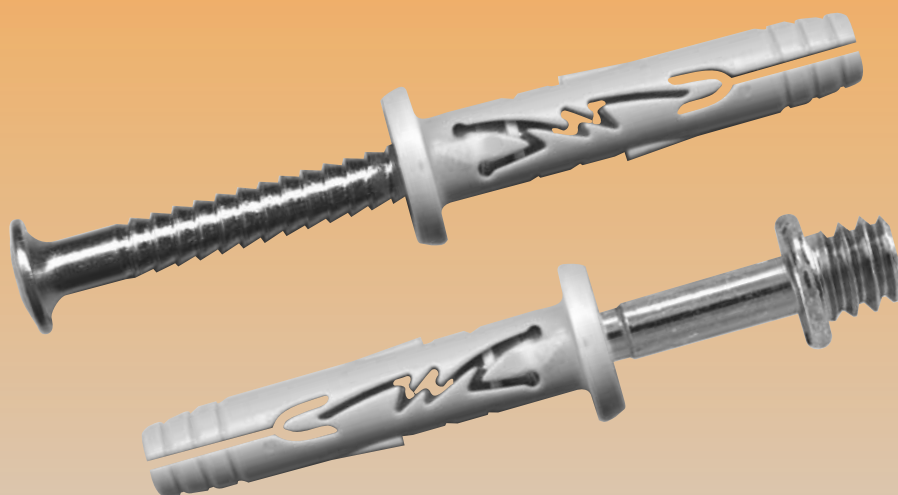


SPIT

right fixing

TECHNICAL SHEET

SPIT HIT M



***Hammer-set anchor for light duty fixing
For concrete and all materials types (hollow masonries,
solid masonries, aerated concrete, plasterboard, ...)***

OCTOBER 2004 - VALIDITY OCTOBER 2007



**ACCEPTED BY SOCOTEC
UNDER N° PX1058**

SPIT HIT M

Field of usage

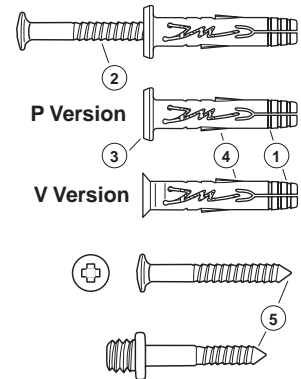
The SPIT HIT M anchor is a fixing delivered with screw assembled for using through the part to be fixed. This anchor could be set by hammer or by screwing, in solid base material (concrete, solid concrete block, solid brick in terracota, aerated concrete) and in hollow base material (hollow brick, hollow concrete block, plasterboard...).

The SPIT HIT M anchor is a forced expanding nail anchor for application with **moderate risk** according to professional rules for plastic anchors published by MTPS in March 2002 Edition 01.

Description

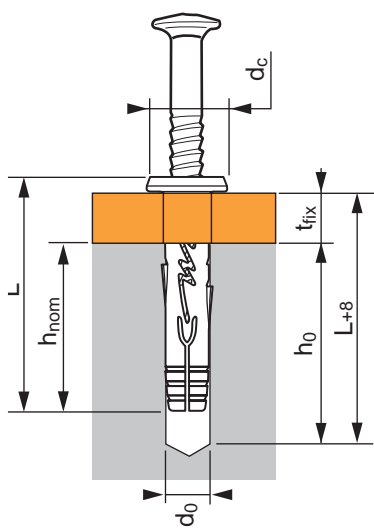
It consists of the following parts:

- An anchor body ① in polyamid 6 including a bearing head ③, an expanding zone ④ and a nail holding in order to avoid pre-expansion of the anchor during the assembly.
- An expansion nail ② in bichromate zinc (5 mm) or in stainless steel A4. This nail consists of an ogive part ⑤ and a special thread which allows disassembly.
- There are 2 head styles for this sleeve: One flat head and one countersink head (Only for Ø6 and 8).
- There are 2 head styles for this nail: Head for cross-recess screwdriver PZ n°2 and a threaded head M6 x100 or M7x150 for collar.



Technical data

SPIT HIT M	Embedment depth (mm)	Maximum thickness of part to be fixed in concrete (mm)	Minimum thickness of base material (mm)	Drilling depth in base material (mm)	Drilling depth forward the part to be fixed (mm)	Drilling diameter (mm)	Cylinder head diameter (mm)	Total anchor length (mm)	Type of nail -	Code	
										Zinc coated steel nail	Stainless steel A4 nail
	h_{nom}	t_{fix} (1)	h_{min}	h_0	$L+8$	d_0	d_c	L	-	-	-
5-5/27P	20	5	60	30	35	5	9	27	PZ2	050116	
5-15/37P		15			45			37		050117	
6-5/32P		5			40			32		050118	050157
6-12/39P	25	12	65	35	47	6	11	39		050119	050158
6-25/52P		25			60			52		050121	050158
6-40/67P		40			75			67		050122	050159
6-12/39V	25	12	65	35	47	6	10	39	050129		
6-25/52V		25			60			52	050131		
6-40/67V		40			75			67	050132		
6/5-M6	30	-	65	40	-	6	11	32	M6	050141	
6/5-M7		-			-			32	M7	050142	
8-10/42P	30	10	65	40	50	8	13	42	PZ2	050123	050161
8-30/62P		30			70			62		050124	050162
8-60/92P		60			100			92		050125	050163
8-80/112P		80			120			112		050126	
8-100/132P		100			140			132		050127	
8-30/62V	30	30	65	40	70	8	11,5	62		050134	
8-60/92V		60			100			92	050135		
8-80/112V		80			120			112	050136		
8-100/132V		100			140			132	050137		



(1): In masonry, the thickness of part to be fixed could be fluctuate to ± 5 mm from t_{fix} for Ø5 et 6 mm, and to ± 10 mm for Ø8 mm, to ensure a good contact between collar and the part to be fixed.

Technical performance

- Complete fixing element.
- Expanding with hammer or by screwing.
- Removable fixing (not reusable).
- Fixing through the part to be fixed (same drilling diameter).
- Temperature installation from -10°C to $+40^{\circ}\text{C}$.
- Temperature resistance from -40°C to $+80^{\circ}\text{C}$.
- Resistance to a corrosive environment (no contact between the expanding nail and the part to be fixed: no bi-metallic corrosion).

Applications

- Insulation cladding,
- Profiles for thin coat external, insulation systems,
- Drywall track,
- Wood,
- Flashing,
- Electrical accessories,
- Collar (Atlas ...),
- ...

Les supports

The SPIT HIT M anchors have been designed to be used them in the followings solid and hollow materials:



Reinforced or non reinforced concrete, cracked or non-cracked, the characteristic strength of which on a 28 day old sample is a minimum of 20 Mpa.



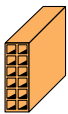
Solid concrete blocs B120
Rc = 13,5 Mpa - 20x20x50 (cm) – NF EN 771-3



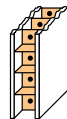
Hollow bricks in terracota type ECO-30, not rendered or rendered
Rc = 3,7 Mpa – 57x20x30 (cm) - NF EN 771-1



Hollow concrete block type B40, not rendered or rendered
Rc = 6,5 Mpa – 20x20x50 (cm) – NF EN 771-3



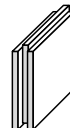
Hollow bricks in terracota Murbric type T20, not rendered or rendered
Rc = 14,5 Mpa – 20x24x50 - NF EN 771-1



Plasterboard Lafarge type BA13 and BA10 + polystyren – NFP 72-302

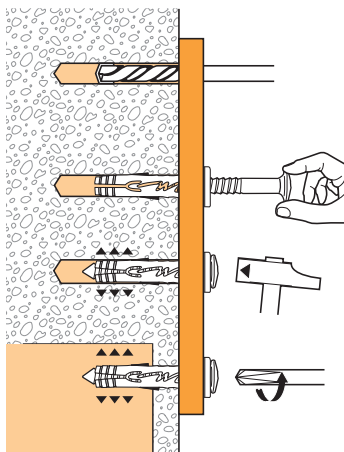


Solid bricks in terracota
Rc = 55 Mpa 22x10x5,5 (cm) NF EN 771-1



Aerated concrete
Mvn = 500 kg/m³ – NF EN 771-4

Installation



Drill a hole through the part to be fixed according to the diameter and the depth indicated in the dimensions table. The power of the hammer must be suited to the base material. For masonries, SPIT hammers will be used in rotation only.

Insert the anchor by hand as far as possible.

Tap on the expanding nail obtain the complete driving of the anchor and until the head of the nail comes into contact with the flange of the anchor.

The SPIT HIT M anchor may be installed by screwing: in this case, the collar must be in contact with the part to be fixed before screwing. Expanding by screwing with a screw machine which has been fitted out with the POZIDRIV PZ2.

Design resistance at the service limit state R_{ds} in daN

The design resistance at the service limit state (kN) indicated in the table below correspond to anchors fixed with hammer and a safety factor of 5 when we consider the mean failure values in tensile and shear. (The part is pressed against the base material without intermediate part).

■ Concrete base material

SPIT HIT M	Design resistance at SLS in concrete \geq C20/25		Minimum distance between anchors and from edges (mm)			
	Tensile N_{Rds}	Shear V_{Rds}	$C_{cr,N}$ mini	$C_{cr,V}$ mini	$S_{cr,1}$ mini without edge influence	$S_{cr,2}$ mini near one edge
5/5 ; 5/15	18	50	25	40	25	60
6/5 ; 6/12 ; 6/25	30	75	25	45	25	70
6/40		60				
8/10 ; 8/30 ; 8/60	42	115	25	60	25	90
8/80 ; 8/100		95				

■ Other base material (See description of base material in page 3)

• Tensile (N_{Rds} in daN)

The below values are given for t_{fix} indicated in the table "Technical data", for another thickness of part to be fixed, institutu tests must be carry out.

SPIT HIT M	Hollow brick Eco 30		Murbric T20		Hollow concrete block		Solid brick Pacema	Solid concrete block	Aerated concrete	Plasterboard BA13 (1)	Plasterboard BA10 + polystyren
	Not rendered	Rendered*	Not rendered	Rendered*	Not rendered	Rendered*					
Ø5	15	25	15	25	17	25	32	28	4	4	5
Ø6	20	35	20	35	19	45	52	31	6,5	4	5
Ø8	25	45	25	45	20	60	72	33	8,5	5	6

* Traditional rendering according to DTU 26.1

• Shear (V_{Rds} in daN)

SPIT HIT M	Hollow brick Eco 30		Murbric T20		Hollow concrete block		Solid brick Pacema	Solid concrete block	Aerated concrete	Plasterboard BA13 (1)	Plasterboard BA10 + polystyren
	Not rendered	Rendered*	Not rendered	Rendered*	Not rendered	Rendered*					
5/5 ; 5/15	15	25	50	50	50	50	50	50	4	4	5
6/5 ; 6/12 ; 6/25	20	35	60	75	60	75	75	75	6,5	4	5
6/40	20	35	60	60	60	60	60	60	6,5	4	5
8/10 ; 8/30 ; 8/60	25	45	75	95	75	95	115	115	8,5	5	6
8/80 ; 8/100	25	45	75	95	75	95	95	95	8,5	5	6

* Traditional rendering according to DTU 26.1

(1): According to DTU 25.41 et 25.42, the loads are limited at 3 daN for using in ceiling for platerboard.

(2): In the quality of the base material is not known, it is advisable to carry our site pullout tests according to specification n° 211-1661 from CSTB "Determination on site of the permissible load for a mechanical fixing of built-up cladding panels."

• **Setting conditions in masonries:** The anchor must be installed at the minimum distance of 100 mm from another anchor and near one edge.

Production and quality assurance

The manufacture of SPIT HIT anchors is carried out in accordance with a control plan aimed at ensuring uniform quality, moreover tests are systematically in our laboratories.

External audit is carried out by SOCOTEC.