GBM EN 1065 SHORING PROPS

PRODUCT INFORMATION

Instructions for installations and use

GBM
SHORING AND SCAFFOLDING

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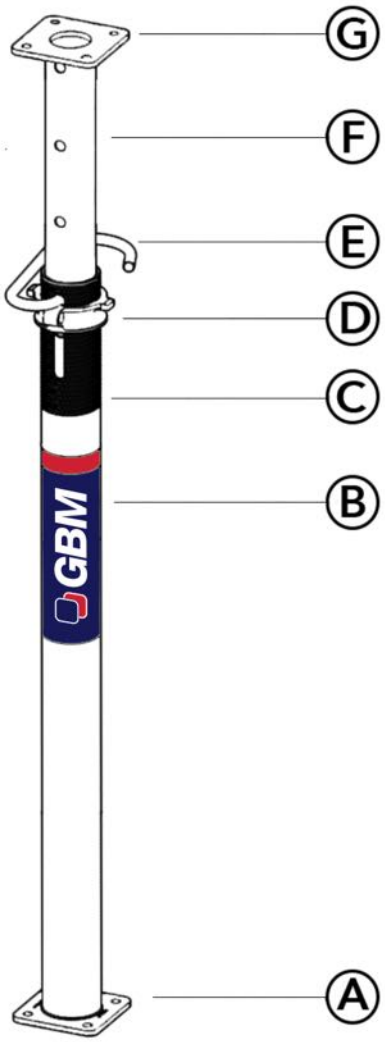
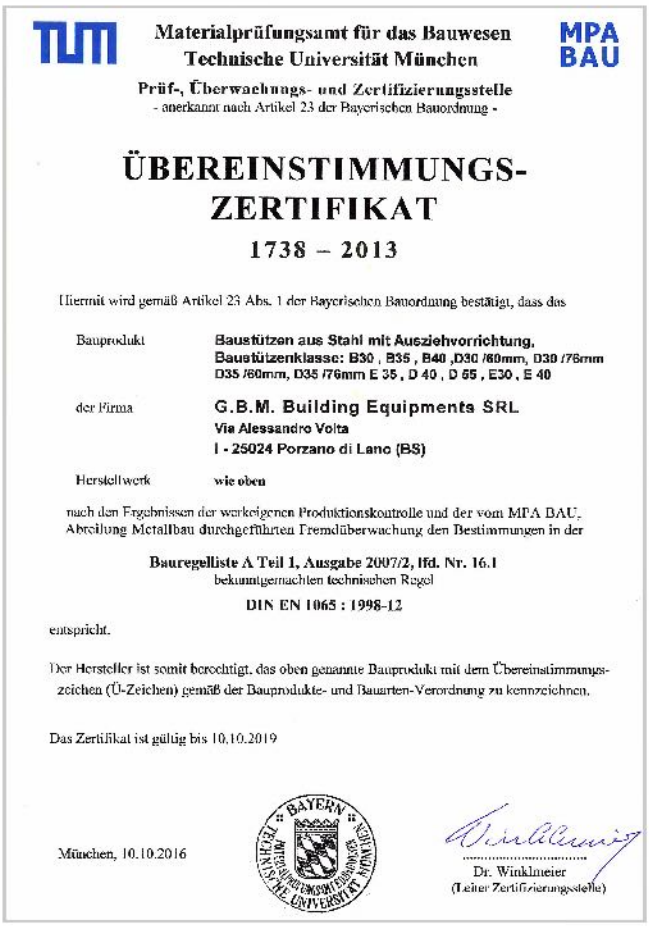
INTRODUCTION

GBM POST SHORE

The GBM flooring props are supporting steel elements with an extendable inner tube, manufactured according to EN 1065. They are used as temporary supporting structures.





Materialprüfungsamt für das Bauwesen
Technische Universität München
MPA BAU

Prüf-, Überwachungs- und Zertifizierungsstelle
- anerkannt nach Artikel 23 der Bayerischen Bauordnung -

ÜBEREINSTIMMUNGS-ZERTIFIKAT

1738 – 2013

Hiermit wird gemäß Artikel 23 Abs. 1 der Bayerischen Bauordnung bestätigt, dass das

Bauprodukt: **Baustützen aus Stahl mit Ausziehvorrichtung, Baustützenklasse: B30 , B35 , B40 ,D30 /60mm, D30 /76mm D35 /60mm, D35 /76mm E 35 , D 40 , D 55 , E30 , E 40**

der Firma: **G.B.M. Building Equipments SRL**
Via Alessandro Volta
I - 25024 Porzano di Lano (BS)

Herstellwerk: **wie oben**

nach den Ergebnissen der werkeigenen Produktionskontrolle und der vom MPA BAU, Abteilung Metallbau durchgeführten Fremdüberwachung den Bestimmungen in der

Bauregelliste A Teil 1, Ausgabe 2007/2, lfd. Nr. 16.1
bekanntgemachten technischen Regel
DIN EN 1065 : 1998-12

entspricht.

Der Hersteller ist somit berechtigt, das oben genannte Bauprodukt mit dem Übereinstimmungszeichen (Ü-Zeichen) gemäß der Bauprodukte- und Bauarten-Verordnung zu kennzeichnen.

Das Zertifikat ist gültig bis 10.10.2019

München, 10.10.2016

Dr. Winklmeier
(Leiter Zertifizierungsstelle)

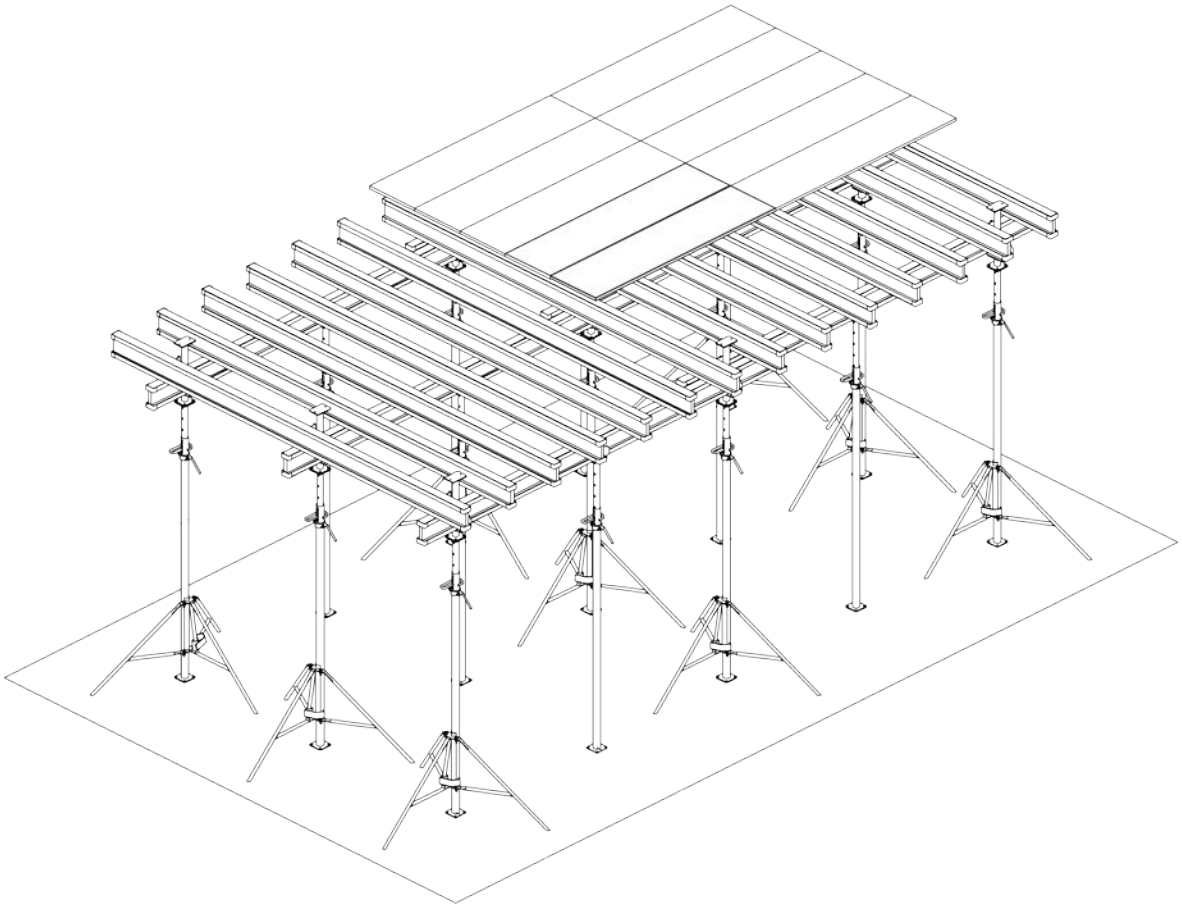
A. Base plate
B. Adhesive label
C. Marked customizable handle
D. Forged steel nut with holes for manual adjustment
E. Not-removable bevelled peg
F. Perforated anti-slip inner tube
G. Head plate

PRIMARY FEATURES

- compliant to EN 1065;
- high loading capacity;
- quick connection: various head elements such as four way for-heads or drop heads may be fitted by means of dedicated pins;
- anti-slip: GBM props are provided with an "anti-slip" system which prevents the escape of the inner tube;
- thread obtained by rolling process on the tube section with greater thickness, ensuring high load capacity and more reliable functionality over time;
- impact/crush-protection: a 10 cm gap with prop fully closed prevents accidental hand crushing;
- hot dip galvanization throughout the prop, also on the threaded parts, ensures long-lasting environmental protection;
- forged steel nut with perforated tabs for faster, more accurate adjustment;
- customizable engraved handle bearing norms references and manufacturer information;
- easy hammer unhooking system;
- bevelled peg for faster hole insertion;
- personalized adhesive label.

ASSEMBLY WITH TRIPODS

- Adjust the GBM prop to its approximate height and lock the position by setting the peg in the selected hole;
- Position the tripod;
- Insert the GBM props in the tripods and lock them by lowering the sliding hook. Check for stability before climbing onto the supported levels;
- Fine-adjust the height of the GBM prop by anti-clockwise rotation of the forged nut.



ASSEMBLY WITHOUT DETACHABLE TRIPODS

- With flooring formwork, intermediate props must be secured against toppling over by means of the supporting head;
- As auxiliary shoring, fix the flooring props against the floor structure so that they cannot disengage and topple.

BACKING OFF GBM PROPS UNDER LOAD

- Loosen the adjustment nut with the hammer, releasing it in a clockwise direction;
- Grasp the inner perforated tube by hand;
- Pull out the bevelled peg so as to release the inner tube; then, guiding it by hand, insert it in its resting position.

INCORRECT USAGE

- Only vertical upright plumb installation is allowed;
- The baseplate must make total surface contact;
- The baseplate must rest only on foundation points with adequate load-bearing strength;
- It is forbidden to stack props on top of each other;
- Do not use bevelled pegs other than the original ones;
- Do not use as a push-pull prop;
- Do not use as trenching braces;
- Do not use as access barriers or anti-fall guards;
- Do not use with excessive curvature of the two plates;

  Permissible plates curvature:

  - max. 1 mm outward deflection
  - max. 3 mm inward deflection
- Do not use if the hole ovalization exceeds 2 mm;
- Check for any cracks in the welds, they not allowed.

GBM PROPS LOADING CAPACITY

PROPS COMPLIANT TO DIN EN 1065 - **CLASS B**

EXTENSION	B 30 1,80 - 3,00 m	B 35 2,00 - 3,50 m	B 40 2,30 - 4,00 m
(meter)	(kN)		
4,0			11,6
3,9			12,6
3,8			13,1
3,7			13,9
3,6			14,8
3,5		15,8	15,5
3,4		17,0	16,2
3,3		18,1	17,1
3,2		18,3	18,3
3,1		20,2	19,4
3,0	21,1	20,8	20,1
2,9	23,1	21,0	21,3
2,8	24,8	21,1	22,8
2,7	27,0	21,4	25,9
2,6	28,9	22,0	30,0
2,5	30,6	23,3	
2,4	32,1	25,1	
2,3	34,0	28,8	
2,2	36,8	30,0	
2,1	39,0		
2,0			
1,9			
1,8			

PROPS COMPLIANT TO DIN EN 1065 - **CLASS D**

EXTENSION	D 30 ECO 1,80 - 3,00 m		D 30 1,80 - 3,00 m		D 35 2,00 - 3,50 m		D 40 2,30 - 4,00 m		D 55 3,00 - 5,50	
	IT UP	IT DOWN	IT UP	IT DOWN	IT UP	IT DOWN	IT UP	IT DOWN	IT UP	IT DOWN
(meter)						(kN)				
5,5									21,8	24,0
5,4									22,9	25,2
5,3									23,9	26,3
5,2									25,1	27,6
5,1									26,6	29,3
5,0									27,5	30,3
4,9									29,3	32,2
4,8									30,6	33,7
4,7									32,6	35,9
4,6									33,7	37,1
4,5									35,6	39,0
4,4									37,6	
4,3									39,0	
4,2										
4,1										
4,0							21,8	25,1		
3,9							22,6	26,0		
3,8							24,5	28,2		
3,7							26,5	30,5		
3,6							27,7	31,9		
3,5					23,9	28,7	29,6	34,0		
3,4					26,0	31,2	31,9	36,7		
3,3					28,1	33,7	33,8	38,9		
3,2					30,3	36,4	35,2	39,0		
3,1					32,1	38,5	36,4			
3,0	21,1	25,3	29,3	35,2	33,3	39,0	38,3			
2,9	23,1	27,7	30,7	36,8	34,2		39,0			
2,8	24,8	29,8	31,6	37,9	34,8					
2,7	27,0	32,4	32,2	38,6	35,4					
2,6	28,9	34,7	32,9	39,0	36,9					
2,5	30,6	36,7	33,6		38,7					
2,4	32,1	38,5	34,6		39,0					
2,3	34,0	39,0	35,7							
2,2	36,8		37,2							
2,1	39,0		38,8							
2,0			39,0							
1,9										
1,8										

GBM SHORING AND SCAFFOLDING

PROPS COMPLIANT TO DIN EN 1065 - **CLASS E**

EXTENSION	E 30 1,80 - 3,00 m		E 35 2,00 - 3,50 m		E 40 2,30 - 4,00 m	
	IT UP	IT DOWN	IT UP	IT DOWN	IT UP	IT DOWN
(meter)	(kN)					
4,0					33,2	36,5
3,9					36,8	40,5
3,8					39,0	41,0
3,7					41,0	
3,6						
3,5			32,0	33,6		
3,4			35,3	37,1		
3,3			37,7	39,6		
3,2			40,0	41,0		
3,1			41,0			
3,0	32,4	35,6				
2,9	35,8	39,4				
2,8	36,4	40,0				
2,7	37,3	41,0				
2,6	38,8					
2,5	39,7					
2,4	40,0					
2,3	41,0					
2,2						
2,1						
2,0						
1,9						
1,8						

PROPS DIMENSIONAL TABLE

		B 30	B 35	B 40	D 30 ECO	D 30	D 35	D 40	D 55	E 30	E 35	E 40
MAX EXTENSION	cm	300	350	400	300	300	350	400	550	300	350	400
MIN EXTENSION		182	207	234	182	173	198	225	303	173	198	225
Ø IN TUBE	mm	48,30			48,30	63,50			76,10	63,50		76,10
Ø OUT TUBE		60,30			60,30	76,10			88,90	76,10		88,90
WEIGHT	Kg	14,50	15,80	17,90	15,90	17,80	19,70	22,10	35,00	17,5	23,80	26,00

GENERAL SAFETY INFORMATION

1. The customer is responsible for the description. documentation. implementation and review of risk assessment on the construction site.
   This document serves as a basis for the evaluation of site-specific risks and includes instructions for set-up and use of the system by the user. However, it does not in itself replace the evaluation in its entirety.
2. The customer must ensure that these instructions (eg. product information. installation and operation instructions, design drawings etc.) provided by GBM are available to all users, kept up to date, divulged and kept available at the location of use.
3. The user must comply with the laws, rules and specific legal provisions of each country and, if necessary, is responsible for implementing further appropriate or additional security measures.
4. All persons working with products described here must be aware of the contents of this documentation, and specifically the safety recommendations.
5. Persons not capable of reading this documentation or have difficulty in doing so must be appropriately informed on all relevant matters by the employer.
6. This documentation is aimed at people who work with the described GBM product and contains information for its regular assembly, monitoring and proper use.
7. This document can also serve as a general assembly and usage instruction guide or it may be integrated into a comprehensive assembly and usage manual that is specifically to be used on a given construction site.
8. The assembly instructions presented in paragraph 2, to be considered as set-up examples, are not exhaustive with respect to compliance with safety standards.
9. Relevant safety devices that may not have been specifically listed must still be used by the customer in accordance with applicable regulations of each country.
10. When working on formwork, ensure safe operational sites (for example: for assembly and disassembly, for adjustment and repositioning operations etc.) The work sites must be accessible via secure access routes.
11. Any usage context that differs from those indicated in these instructions requires a specific static structural assessment and supplementary assembly instructions must be generated.
12. Safe use of our products requires full compliance with the laws, rules and safety regulations for workplace health and safety as well as other safety regulations in force in the respective countries. Instructions pertinent to EN 13374: in the event that a person or an object should fall against or within the lateral protection and its respective accessories, this protective element may continue to be used only after it has been checked by a competent expert.

INDICATIONS APPLICABLE TO ALL OPERATING STAGES

- The customer must ensure that operation of assembly and disassembly, transport and correct use of the products are carried out under the supervision of skilled responsible personnel authorized to give instructions. The physical and mental capacity of these supervisors in charge must not be impaired by alcohol, medication or drugs.
- During each operational stage, adequate stability of all the individual elements and element combinations must be ensured.
- All instructions concerning operation, safety and loading capacity must be strictly observed. Failure to do so could lead to accidents and severe (possibly life-threatening) damage to health as well as considerable material damage.
- Fires in the vicinity of formwork are not allowed. Electrical heating equipment is permitted only if used at a safe distance from the formwork.
- Site operations must adapt to prevailing weather conditions. In extreme weather conditions, preventive measures must be taken to secure the equipment and the surrounding area to ensure adequate safety for personnel.
- It is strictly forbidden to weld, heat or cut GBM products. The materials of these elements undergo significant structural changes if they are welded, resulting in a drastic decrease in the breaking load, thus jeopardizing safety.
- Before use, the customer must check the condition of the material/system. Items found to be damaged, deformed, weakened by wear, corrosion or deterioration must be discarded.
- Installation should be done according to applicable laws, rules and regulations, by experts answerable to the customer and any relevant inspection provisions must be respected.
- Applicable fresh concrete pressure limitations must be observed. Excessive jet speeds can overload the formwork, leading to greater deflection and consequent risk of collapse of the entire structure.
- Formwork may be struck only when the concrete has cured to sufficient strength and under the authorization of the supervisor in charge.
- When striking the formwork, never use a crane to force separation from the concrete surface. Use suitable tools such as timber wedges, pry-bars or dedicated system implements.
- During striking operations, care must be taken to avoid compromising the stability of the building parts, scaffolding and the formwork itself.
- Observe all applicable provisions concerning the transportation of formwork and shoring systems.
- Secure moving parts so they cannot slip or fall.
- Exclusively GBM original spare parts may be used. Repairs should be carried out only by the manufacturer or its authorized service centres.

ACCESSORIES

PROP HEAD FOR H20

kg 0,75

- Total height: 185 mm
- Inside widht: 42 mm
- Inside lenght: 81 mm

FOUR WAY HEAD FOR H20

kg 2,40

- Total height: 330 mm
- Inside widht: 85 mm
- Inside lenght: 170 mm

DROP HEAD FOR H20

kg 7,50

- Total height: 700 mm
- Inside height: 400 mm
- Inside widht: 220 mm
- Inside lenght: 125 mm

SPRING LOCKED PIN

kg 0,25

- Lenght: 155 mm
- Diameter: 16 mm

TRIPOD

kg 8,50

- Height: 800 mm
- Widht: Ø 1500 mm

STACKING PALLET

kg 40,00

- Total height: 840 mm
- Inside widht: 700 mm
- Inside lenght: 1400 mm
- Max loading capacity: 1500 kg

Notes

GBM WORLDWIDE

GBM Shoring and Scaffolding

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