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I. General information

- 1. Mobile scaffold offered by Baumann Mostostal Sp. Z o.o are designed for working on both inside and outside of building, with max. load of working platform 2,0 kN/m² (200 kG/m²).
- 2. In the close space max, height of operational platform should not exceed 12m and in the open space max, height amounts 8m.
- 3. These scaffolds can be exploited in the different ways:
 - without trolley beam
 - version with support and without angle support
 - with trolley beam
 - central erection
 - one- sided erection

4. The rules of assembly and exploitation and scaffold structure were established in accordance with :

- Polish Standard PN-M-47900-1:1996 "Steel working scaffolds. Specification, division and main parameters".
- Polish Standard PN-M-47900-1:1996 "Steel working scaffolds. Standing scaffolds made from tubes".
- Polish Standard PN-M-47900-1:1996 "Steel working scaffold. Frame scaffold."
- Polish Standard PN-880/M-49060 "Machines and tools. Enters and accessions".
- Harmonization Document HD 1004
- DWP.II.077-175/JT/97.
- Minister of Labour and Social Policy Disposal DWP.II.077-500/JT/2000 allows for partly excuse Polish Standard PN-80/M-49060
- Minister of Building and Building Accessories Industry Disposal in the scope of safety and hygienic standards at building, assembling and disassembling works was issued on 28.03.1972.



- Minister of Labour and Social Policy Disposal in the scope of general safety rules and hygienic standards at work was issued on 26.09.1997.

II. Obligatory safety rules at mobile scaffold exploitation.

- 1. Assembling scaffold you will adhere to the recommendations of ballasting weights. The sizes of ballasting weights depended on type of configurations was compared in the ballast table. Not taking into consideration the recommendations impends danger and scaffolds demolition.
- 2. Scaffold assembly and their exploitation should be carried out by the people who are familiarised with assembly instruction and exploitation. The User is responsible for scaffold exploitation in accordance with this instruction.
- 3. Before assembling check all elements of scaffold according to technical condition. At assembling you should use only original elements, without any damages and which are belonged to the system of mobile scaffold.
- 4. Using and assembling hoisting winches in the mobile scaffold are strongly forbidden.
- 5. Using scaffold in the open space or in the open buildings where the force of wind goes beyond **6B** (**12** m/s), after finishing works you should move the scaffold in the place protected against the wind or just disassembly it.
- 6. Before starting exploitation you should check the scaffold regarding the proper assembling.
- 7. People who are working on the scaffold mustn't rest on protective railing, leaning out of the platform and climbing outside of the platform.
- 8. Setting and moving scaffold are allowed only on the level, flat and acceptable bearing ground. Scaffolds are allowed to be moved **only manually** in theirs longitudinal toward or through the corner (direction of diagonal groundwork). Move the scaffold at normal walking speed and avoid collision with any objects.
- Regulate the scaffold vertically. Make vertical regulation using screw of regulated footings. Max. extension of one support is limited to 30 mm. This distance is between footing sheet and bottom nut of regulated footing.
- 10. Protect front frames joints before unwilling extension using spring cotters.
- 11. During moving the scaffold there must not be any peoples and objects.
- 12. After moving scaffold in the desired place you should immobilise castors with pressing brake lever.
- 13. Entering into the operational platform is processed inside of the scaffold. Entering into the operational platform from the outside is forbidden. Installing platforms involves in keeping arrangement of pass-by of platforms with flap in the vertical position. Coming into the platform is going through opening the flap. If you are on the platform keep the flap closed.
- 14. Operational platform and protective platform have to be equipped with double railing and longitudinal and transverse curbs.
- 15. Installing platforms between scaffold and the building is strongly forbidden.
- 16. Before you begin using scaffold you have to check if the breaks of all castors were immobilised.
- 17. Jumping on the platform is strongly forbidden.

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- 18. Scaffold which is exploited in the open space should be anchoring to the building or any immovable construction.
- 19. During using the scaffold, there is allowed working only on one platform.
- 20. At the scaffold exploitation, there are adequately disposals of Minister of Building and Building Accessories Industry issued on 18.03.1972 Chapter 4 and and Disposal of Minister of Labour and Social Policy issued on 26.09.97 Chapter E.
- 21. Using scaffolds in the neighbourhood of voltage lines should be made in accordance with Polish Standard PN-M-47900-2:1996 "Standing working scaffold. Standing scaffold made from tubes", point 4.9 "Electric lines".

III.GENERAL RECOMMENDATIONS FOR MOBILE SCAFFOLD ASSEMBLY

Assembling the separate storeys of scaffold protect vertical joints with spring cotters. All platforms (pass-by type, protective type and operational type) are made from single pass-by platform (MP Mini, MP 600, MP 1000) or made from two platforms: aluminium with plywood and aluminium pass-by which are placed next to each other (MP 800, MP 2000). Flaps of two following storeys should not be placed in one section. All platforms should be equipped with railings: main one and direct (railing girders or horizontal brace), and longitudinal and transverse curbs. Main rail should be installed on the height of 1,10 m, and direct rail on the height of 0,55 m above the surface of platform. Depending on type of scaffolds you should stiffen trolley chassis using base coupler or stiffening coupler and being in accordance with scaffold configuration.

Castors are equipped with blocking mechanism which is activated by lever. Blocking castors is possessed simultaneously in horizontal axis and in the vertical axis. During working on the scaffold and assembling castors should be blocked.

Single vertical angle brace should begin on the first frame rung of bottom storey and end on the last rung of opposite frame of the same storey. Angle vertical brace of single side set should form zigzag. Braces of one storey should criss-cross one another.

Technical inspection of assembled scaffold; acceptance of scaffold exploitation; inspection during exploitation; storing and transport should be made in accordance with Polish Standard PN-M-47900-2:1996 "Standing working scaffold. Standing scaffold made from tubes".

During the scaffold assembling and disassembling you should use boards 2'' thick and 0,6 m longer than length of scaffold. These boards are used as additional platforms on the indirect storeys in the purpose of making easier assembling of elements of higher storey.





1.1. CONFIGURATIONS AND STABILITY OF SCAFFOLD MP MINI.

| Item of assembling scheme | Symbols | Scaffold configuration Element name | Element weight (kg/pcs) | MP mini 601 | MP mini 602 | Mp mini 603 |
|---------------------------------|---------|--|-------------------------------|----------------|----------------|----------------|
| 1 | MP-101 | Trolley beam 1,80 | 16,40 | | 2 | 2 |
| 2 | MP-111 | Transverse curb 0,75 | 3,10 | | 2 | 2 |
| 3 | MP-112 | Spring cotter | 0,10 | 4 | 12 | 16 |
| 4. | MP-113 | Angle vertical brace 2,63 m | 3,78 | | ~ | 2 |
| 5 | MP-117 | Pass –by platform with flap 0,64x2,85 | 18,18 | / | 1 | 1 |
| 6 | MP-118 | Angle horizontal brace | 5,52 | 7 | 1 | 1 |
| 7 | MP-119 | Longitudinal curb | 5,10 | | 2 | 2 |
| 8 | MP-121 | Base coupler | 6,25 | 1 | | 1 |
| 9 | MP-133 | Foldable frame mini | 22,98 | 1 | 2 | 3 |
| 10 | MP-135 | Horizontal brace | 3,24 | | 4 | 4 |
| 11 | MP-136 | Castor | 0,90 | 4 | 4 | 4 |
| 12 | MP-137 | Footing | 0,45 | 4 | 4 | 4 |
| 13 | MP-129 | Aluminium platform with plywood 1,80x0,61 | | 1 | | |
| | | Scaffold weight [Kg] | | 46,0 | 138,4 | 175,6 |
| | (| Operational scaffold height [m] | | 2,90 | 3,88 | 5,53 |
| | | Scaffold height[m] | | 1,96 | 3,76 | 5,41 |
| | C | Deprational platform height [m] | | 0,90 | 1,88 | 3,53 |

Attention: MP Mini 601 and MP Mini 602 have not received Safety Certificate IMB and GS because of operational platform height is less than 2 m.

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- 1. Stability of scaffold being in dependence on their height is provided by their dead-weight and stabilising ballasting weights.
- 2. Setting ballasting weights in dependence on scaffold configuration is presented below in the tables.
- 3. Asymmetrical setting ballasts (for MP- 603) should be put on the protrusion wrist– pin of trolley beam. Load of one ballasting weight amounts 26 kg.

Table of ballasting scaffold MP Mini 600 Setting inside of building

| G 00 1 1 | | oer or oundstin | ig weight each 20 | 0 0 | | | |
|---------------|------------------------|-----------------|-------------------|--------------------------|-----------------|--|--|
| Scaffold type | Operational | farmer and | Setting o | of footing | | | |
| | platform height [m] | Variant I- | symmetrical | Variant II- asymmetrical | | | |
| | neight [m] | A | в | АВ | | | |
| | | | 3 | 」 正 | | | |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" | | |
| MP Mini 601 | 0,90 | Without ballast | Without ballast | Without ballast | Without ballast | | |
| MP Mini 602 | 1,88 | Without ballast | Without ballast | Without ballast | Without ballast | | |
| MP Mini 603 | 3,53 | Without ballast | Without ballast | Without ballast | 2 pcs | | |

Number of ballasting weight each 26 kg weigh

Setting outside of building

Number of ballasting weights each 26 kg weigh.

| Scaffold type | Operational platform | | Setting o | f footing | |
|---------------|----------------------|-----------------|-----------------|-----------------|-----------------|
| | height [m] | Variant I-s | symmetrical | Variant II- as | symmetrical |
| | | < - | в | | в • |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" |
| MP Mini 601 | 0,90 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP Mini 602 | 1,88 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP Mini 603 | 3,53 | Without ballast | Without ballast | Without ballast | 2 pcs |
| | | The Mari | Citt. | | |

1.2. THE SEQUENCE OF ASSEMBLY

MP Mini 601range.

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- 1. Take elements in accordance of set.
- 2. Put sets of castors into the vertical pipes of foldable frame Mini. Protect joints with using spring cotters.
- 3. Set frame in the vertical position and put aluminium platform 1,80 m on the third rung from the bottom of frame.

MP Mini 602 range.

- 1. Take elements in accordance of set.
- 2. Put sets of castors into the outer pipes of trolley beam. Protect joints with using spring cotters.
- 3. Set trolley beam in the vertical position and put foldable frame Mini on the piloting pipes of trolley beam.
- 4. Assembly angle horizontal brace in the bottom ends of vertical pipes of foldable frame Mini.
- 5. Install pass- by platform on the last rung of foldable frame Mini.
- 6. Being on the operational platform install foldable frame Mini, than put horizontal brace acting as main railing and direct railing (on the second and fourth rung above the platform) and longitudinal and transverse curbs.

Attention: MP Mini 601 and MP Mini 602 have not received Safety Certificate IMB and GS because of operational platform height is less than 2 m.

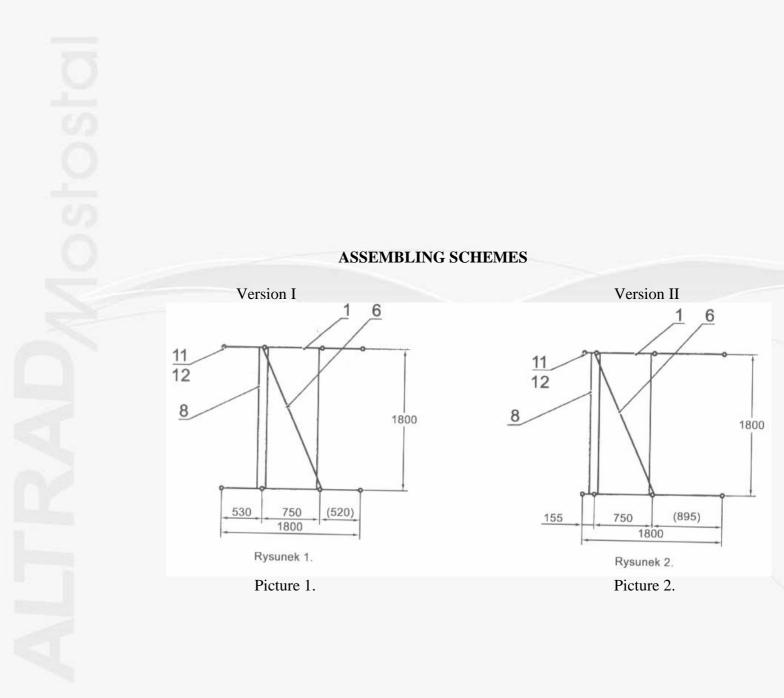
MP Mini 603 range.

Find points 1-4 of MP Mini 602 range.

- 5 .Install base coupler on the bottom ends of vertical pipes of foldable frame Mini (above angle horizontal brace).
- 6. Install foldable frame of the second storey on the wrist –pin of frame of first storey. Stiffening frame install alternate regarding frame of first storey. Protect joint with using spring cotters.
- 7. Install angle vertical brace between first rung of first storey and the second frame rung of second storey in accordance with the picture (install brace not in the criss-crossed surface of frame of first storey). Such as before, install angle vertical brace between the last frame rung of second storey and the second rung from the top of frame of first storey. Braces should be assembled askew and alternatively.
- 8. Assembly pass-by platform on the last rung of foldable frame Mini of the second storey.
- 9. Being on the operational platform install foldable frame Mini and install braces horizontally behaving as main railing and direct railing (on the second and fourth rungs above platform) and longitudinal curbs and transverse curbs. Protect joint of frames with spring cotters. Install stiffening frame alternate according to the frame of second storey.





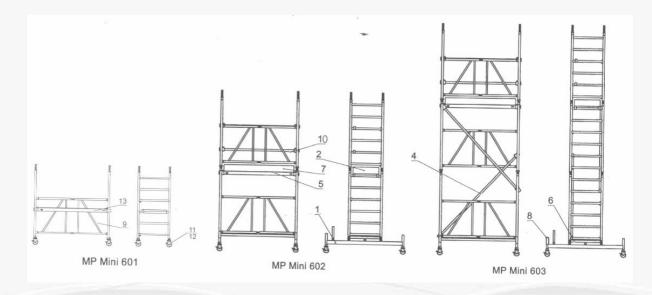




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Attention: MP Mini 601 and MP Mini 602 did not receive Safety Certificate IMB and GS because of height of operational platform less than 2 m.

MP 600

2.1. CONFIGURATIONS AND STABILITY OF SCAFFOLD MP 600.

| Item of assemb scheme | Symbols | Scaffold configuration Element name | Element weight (kg/pc) | MP 602 | MP 603 | MP 604 | MP 605 |
|-----------------------------|---------|---|------------------------------|--------|--------|--------|--------|
| 1 | MP-101 | Trolley beam 1,80 m | 16,40 | 2 | 2 | 2 | 2 |
| 2 | MP-102 | Front frame 2,00x0,75m | 8,56 | 2 | 4 | 4 | 6 |
| 3 | MP-103 | Supporting frame 1,10x0,75m | 5,13 | 2 | | 2 | 2 |
| 4. | MP-117 | Pass- by platform with flap 1,80x0,61m | 18,18 | 1 | 1 | 2 | 2 |
| 5 | MP-119 | Transverse curb 1,80m | 5,10 | | 2 | 4 | 4 |
| 6 | MP-111 | Longitudinal curb 0,75m | 3,10 | 'IGR 2 | 2 | 4 | 4 |
| 7 | MP-120 | Double railing 1,80m | 7,21 | 2 | 2 | 4 | 4 |

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| 8 | MP-139 | Stiffening coupler 1,80m | 8,03 | 1 | 1 | 1 | 1 |
|----|--------|---------------------------------|------|-------|-------|-------|-------|
| 9 | MP-135 | Horizontal brace 1,80m | 3,24 | | 2 | | 2 |
| 10 | MP-118 | Angle horizontal brace 1,95 | 5,52 | 1 | 1 | 1 | 1 |
| 11 | MP-113 | Angle horizontal brace 2, 63 m | 3,78 | 2 | 2 | 4 | 4 |
| 12 | MP-121 | Basis coupler 1,80m | 6,25 | 1 | 1 | 1 | 1 |
| 13 | MP-114 | Regulated footing with two nuts | 5,20 | 4 | 4 | 4 | 4 |
| 14 | MP-116 | Castor | 4,75 | 4 | 4 | 4 | 4 |
| 15 | MP-112 | Spring cotter | 0,10 | 8 | 8 | 12 | 12 |
| | | Scaffold weight [KG] | | 177,2 | 190,5 | 251,2 | 264,6 |
| | | Operational scaffold height [M] | | 4,32 | 5,15 | 6,25 | 7,07 |
| | | Scaffold height[M] | | 3,66 | 4,49 | 5,59 | 6,41 |
|) | | Operational platform height [M] | | 2,32 | 3,15 | 4,25 | 5,07 |

Attention: Scaffold height is given for max. extension of regulated footing with castor. Height of mobile set amounts H=325 mm.

- 1. Stability of scaffold depending on their configuration is provided by their deadweight and ballasting weights.
- 2. Setting of ballasting weights depending on their configuration was presented below in the tables.
- 3. Forming trolley chassis (before next stage of assembling) you should mount ballasting weights on protruding pins of regulated footing with taking advantage of blasting weights MP-123 in accordance with table of ballasting weights. Load of one ballast amounts 26 kg.

<u>Table of ballasting scaffold MP 600</u> Setting inside of building

Number of ballasting weight each 26 kg weigh.

| Scaffold type | Operational platform height | Setting of footing | | | | | | |
|------------------|--------------------------------|--------------------|-----------------|--------------------------|-----------------|--|--|--|
| type | [m] | Variant I-sy | mmetrical | Variant II- asymmetrical | | | | |
| | | | в | | B | | | |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" | | | |
| MP 602 | 2,32 | Without ballast | Without ballast | Without ballast | Without ballast | | | |
| MP 603 | 3,15 | Without ballast | Without ballast | Without ballast | Without ballast | | | |
| MP 604 | 4,25 | Without ballast | Without ballast | Without ballast | 1 pcs. | | | |
| MP 605 | 5,07 | 1 pcs. | 1 pcs. | 1 pcs. | 2 pcs. | | | |

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Setting outside of building

| Scaffold type | Operational platform height | | Setting of | f footing | | |
|------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------|--|
| • • | [m] | Variant I-s | ymmetrical | Variant II- a | asymmetrical | |
| | | | в | АВ | | |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" | |
| MP 602 | 2,32 | Without ballast | Without ballast | Without ballast | Without ballast | |
| MP 603 | 3,15 | Without ballast | Without ballast | Without ballast | 2 pcs. | |
| MP 604 | 4,25 | Without ballast | Without ballast | Without ballast | 2 pcs | |
| MP 605 | 5,07 | 1 pcs. | 1 pcs. | 1 pcs. | 4 pcs. | |

2.2 THE SEQUENCE OF ASSEMBLY.

MP 602 range

- 1. Take elements in accordance to the set.
- 2. Put sets of castors into the outer pipes of trolley beam. (top nut of footing should be removed).
- 3. Set trolley beam in the vertical position and put stiffening coupler on one side of the outer pipes. Length of construction amounts -1,80 m.
- 4. Level construction with regulating nuts. Nuts should be screwed out max. to 30 mm from the top surface of regulated footing and than stiffen it by twisting top nuts.
- 5. Put bearing frames of first storey on the piloting pipes of trolley beam and protect it with spring cotters.
- 6. Fasten frames of first storey with two vertical braces.
- 7. Assembly angle horizontal brace 1,95 and basis coupler on the pipes of vertical frames 2,0 m.
- 8. Put platform on the last frame rungs of first storey.
- 9. Being on the operational platform build second storey according to the picture, assembly front rail and protect it with spring cotters and than install double railings and curbs both longitudinal and transverse.

<u>MP 603 range</u>

See points 1-7 of MP 602 range.

- 8. On the last frame rungs of first storey put two horizontal braces on the opposite side of construction.
- 9. Build over the second storey according to the picture (operational platform on the third rung from the bottom frames of second storey).

<u>MP 604 range.</u>

See points 1-7 of MP 602 range.



8. On the last frame rungs of first storey put protective platform and curbs.

9. Build over the second storey according to the picture (operational platform on the last

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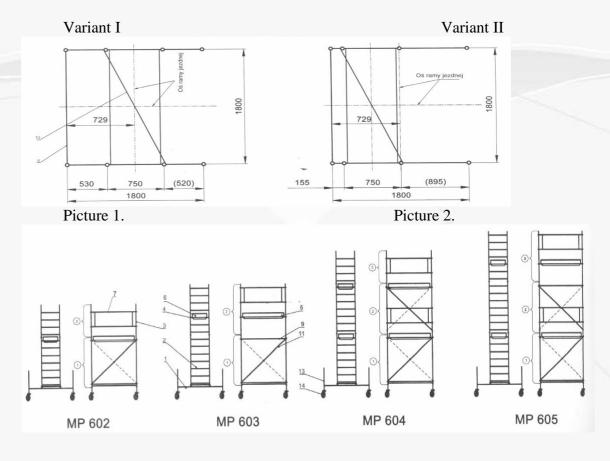
frame rung of second storey). 10.Build over the third storey according to the figure.

MP 605 range

See points 1-7 of MP 602 range.

- 8. On the last frame rung of first storey put the protective platform.
- 9. Being on the protective platform of first storey build over second storey according to the picture.
- 10. Enclose third platform according to the picture (operational platform on the third rung from the bottom frame of third storey).

ASSEMBLING SCHEME



MP 800

3.1 Configurations and stability of scaffolding MP 800.

| Item of assem. scheme | Sym. | Scaffold configura Element name | Weight (kg) | MP 802 | MP 803 | MP 804 | MP 805 | MP 806 | MP 807 | MP 808 | MP 809 | MP 810 | MP 811 | MP 812 |
|-----------------------------|--------|------------------------------------|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1 | MP-108 | Bottom platform frame 0,70m | 3,14 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |

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| 2 | MP-112 | Spring cotter | 0,10 | 4 | 4 | 8 | 8 | 12 | 12 | 16 | 16 | 20 | 20 | 24 |
|----|-----------|--|-------|-------|-------|-------|------------|-------|-------|-------|-------|-------|-------|-------|
| 3 | MP-113 | Angle vertical brace 2,63 m | 3,78 | 2 | 2 | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 |
| 4. | MP-116 | Castor diameter | 4,75 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 5 | MP-117 | Pass –by platform with flap 1,80 x 0,61m | 18,18 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 |
| 6 | MP-119 | Longitudinal curb | 5,10 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 |
| 7 | MP-120 | Double railing | 7,21 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 8 | MP-121 | Base coupler | 6,25 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 9 | MP-124 | Transverse curb | 4,55 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 |
| 10 | MP-126 | Supporting frame | 13,04 | 2 | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 |
| 11 | MP-127 | Front frame | 7,64 | 2 | | 2 | | 2 | | 2 | | 2 | | 2 |
| 12 | MP-129 | Aluminium platform with plywood | 17,22 | 2 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 |
| 13 | MP-131 | Support | 6,67 | | | | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 14 | MP-135 | Horizontal brace | 3,24 | | 2 | | 2 | 2 | 4 | 6 | 8 | 8 | 10 | 12 |
| 15 | MP-138 | Regulated footing with nut and screw | 4,81 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| | | Scaffold weight [kg] | | 186,4 | 203,7 | 289,6 | 318,6 0 | 341,8 | 359,1 | 443,5 | 460,8 | 484,1 | 501,3 | 600,8 |
| | | Working height [m] | | 4,17 | 5,00 | 6,10 | 6,92 | 8,02 | 8,85 | 9,95 | 10,77 | 11,87 | 12,70 | 13,80 |
| 2 | | Scaffold height [m] | | 3,51 | 4,61 | 5,43 | 6,53 | 7,36 | 8,46 | 9,28 | 10,38 | 11,21 | 12,31 | 13,13 |
| | Operation | nal platform height[m] | | 2,17 | 3,00 | 4,10 | 4,92 | 6,02 | 6,85 | 7,95 | 8,77 | 9,87 | 10,70 | 11,80 |

- **1.** Stability of scaffolding in dependence on their configuration (height) is provided by their dead-weight and stabilising ballasts.
- 2. Set of ballasts in dependence on scaffolding configuration and support setting was placed in below table.
- **3.** You should install ballasts on the stabilising platform in accordance with ballasting tables and taking advantage of ballasting weights MP-123. Load of one ballasting weight amounts 26kg.

Table of ballasting scaffold MP 800 without supports.

Number of ballasting weights each 26 kg load.

| I | Scaffold | Operational | TÜV | MNJ | Setting of scaffold | |
|---|----------|-------------|-----|-----|---------------------|--|
| | | | | | HAP | |



| type | platform height [m] | Close space | Outside of building |
|--------|---------------------------|---------------------------------|---------------------------------|
| | | Ballast install on the platform | Ballast install on the platform |
| MP 802 | 2,32 | Lack ballast | Lack ballast |
| MP 803 | 3,15 | Lack ballast | Lack ballast |
| MP 804 | 4,25 | Lack ballast | 1 pcs. |
| MP 805 | 5,07 | 1 pcs. | 5 pcs. |
| MP 806 | 6,17 | 4 pcs. | 8 pcs. |

Table of ballasting scaffold MP 800 with supports

Setting inside of building

Number of ballasting weights each 26 kg weigh.

| Scaffold | Operational | | Footi | ng setting | |
|----------|-------------|-----------------|-----------------|-----------------|-----------------|
| type | platform | Variant I- s | ymmetrical | Variant II- as | symmetrical |
| | height | | | | |
| | [m] | | | | |
| | | /EA | EN | - 4- | |
| | | /fil | | Fuir | 1 |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" |
| MP 802 | 2,17 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 803 | 3,00 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 804 | 4,10 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 805 | 4,92 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 806 | 6,02 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 807 | 6,85 | Without ballast | Without ballast | Without ballast | 2 pcs. |
| MP 808 | 7,95 | Without ballast | Without ballast | Without ballast | 2pcs. |
| MP 809 | 8,77 | Without ballast | Without ballast | Without ballast | 3pcs. |
| MP 810 | 9,87 | Without ballast | Without ballast | Without ballast | 5pcs. |
| MP 811 | 10,70 | Without ballast | Without ballast | Without ballast | 7pcs. |
| MP812 | 11,80 | Without ballast | Without ballast | Without ballast | 10pcs. |

Setting outside of building

Number of ballasting weights each 26 kg weigh.

| Scaffold | Operational | | Foot | ing setting | | |
|----------|---------------------------|------------------------|-----------------|--------------------------|-----------------|--|
| type | platform height [m] | Variant I- symmetrical | | Variant II- asymmetrical | | |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" | |
| MP 802 | 2,17 | Without ballast | Without ballast | Without ballast | Without ballast | |
| MP 803 | 3,00 | Without ballast | Without ballast | Without ballast | Without ballast | |
| MP 804 | 4,10 | Without ballast | Without ballast | Without ballast | Without ballast | |
| MP 805 | 4,92 | Without ballast | Without ballast | Without ballast | 2 pcs. | |
| MP 806 | 6,02 | Without ballast | Without ballast | Without ballast | 6 pcs. | |
| MP 807 | 6,85 | Without ballast | Without ballast | Without ballast | 8 pcs. | |
| MP 808 | 7,95 | Without ballast | Without ballast | Without ballast | 10 pcs. | |
| MP 809 | 8,77 | | impermissi | ble using scaffold | | |
| MP 810 | 9,87 | TW Mr | JI ott | | | |
| MP 811 | 10,70 | increase 1-11 | IGR | | | |
| MP 812 | 11,80 | | | | | |

3.2. THE SEQUENCE OF ASSEMBLY

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<u>802 range</u>

- 1. Take elements according to the set.
- 2. Screw frame of bottom platform down to the central rung of supporting frame 2 m high.
- 3. Put set of castor with regulated screw into vertical frame tubes 2m.
- 4. Set frames vertically and install aluminium platform with plywood on the frames of bottom platform. Such set join with vertical braces. Braces should be crossed and situated on the opposite sides of construction.
- 5. Level construction through regulating nuts. Nuts should be max. screwed out on the bolt. Before turn protect nuts with screwing butterfly screw into the hole of supporting frame 2m. Bottom platform frame join with base coupler as low as it is possible on the vertical tubes of bottom platform frames.
- 6. On the last frame rungs 2m put aluminium platform with plywood next to pass-by platform .
- 7. Come in to such assembled operational platform and put front frames and two double railings on the opposite sides of construction: top bands of double railings should be placed on the height of 1,10 m. Protect frames with spring cotter.
- 8. Install longitudinal and transverse curbs.

<u>803 range</u>

Points 1-5 are parallel to 802 range.

- 6. On the last frame rungs 2m put horizontal braces on the opposite sides of construction.
- 7. On the supported frames put the next storey of frames and protect it with cotters.
- 8. Come in to such assembled operational platform and put front frames and two double railings on the opposite sides of construction: top bands of double railings should be placed on the height of 1,10 m. Protect frames with spring cotter.
- 9. Put aluminium platform with plywood next to pass-by platform on the third frame rung 2m of second storey and put two double railings on the opposite sides of construction: top bands of double railings should be placed on the height of 1,10 m.
- 10. Install longitudinal and transverse curbs.

<u>804 range.</u>

Points 1-5 are parallel to 802 range.

- 6. On the last frame rungs 2m put aluminium platform with plywood next to pass-by platform.
- 7. On the supported frames put the next storey of frames 2m and protect it with cotters.
- 8. Second storey of frames brace parallel as first storey. Braces of single side of construction should form zigzag.
- Come into such formed protective platform and install complete protections, i.e. two double railings as barriers on the height of 1,10 m and longitudinal and transverse curbs.
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10. See next actions at points 6-8 of 802 range.

<u>805 range</u>

Points 1-9 are parallel to 804 range.

10. See subsequent actions at points 6-10 of 803 range.

<u>806 range</u>.

Points 1-5 are parallel to 802 range.

- 6. On the last frame rungs 2m put horizontal braces on the opposite sides of construction.
- 7. On the supported frames put the next storey of frames 2m and protect it with cotters.
- 8. Second storey of frames brace parallel as first storey. Braces of single side of construction should form zigzag.
- 9. Under the last frame rung of first storey, on the tubes of vertical frames install supports. Arrange it in case of form max. large base. Inner tube of supports extend and block with nut.
- 10. On the last frame rungs 2m put aluminium platform with plywood next to pass-by platform.
- 11. Come into such formed protective platform and install two supporting frames 2m of third storey and four cotters. Install two vertical braces and two double railings as barriers. Around platform install longitudinal and transverse curbs.
- 12. See next actions at points 6-8 of 802 range.

<u>807 range</u>

Point 1-11 parallel to set 806.

12. See subsequent actions at points 6-10 of 803 range,.

<u>808 range.</u>

Points 1-8 are parallel to 804 range.

- 9. Come into such formed resting platform and install complete protection i.e. four horizontal braces (on the height of 1,10m and 0,55 m over platform storey) and longitudinal and transverse curbs.
- 10.Under the last frame rung of first storey, on the tubes of vertical frames install supports. Arrange it in case of form max. large base. Inner tube of supports extend and block with nut.
- 11.On the last frame rungs 2m of second storey put two horizontal braces.
- 12.On the frame of second storey put frames of third storey and protect it with cotters.
- 13. Third storey brace vertically.
- 14. On the last rungs of third frame storey 2m install aluminium platform with plywood and next to pass-by platform.
- 15. Find point 13 of 806range regarding fourth storey.
- 16. Find point 6-8 of 802 range.

<u>809 range.</u>

Points 1-15 are parallel to 808 range.

17. See subsequent actions at points 6-10 of 803 range.



<u>810 range.</u>

Points 1-10 are parallel to 806 range.

- 11.Come into such formed platform and install two frames 2m of third storey and four cotters. Put vertical braces and complete protections i.e. four horizontal braces (on the height of 1,10m and 0,55 m over platform storey) and longitudinal and transverse curbs.
- 12.On the last frame rungs2m of third storey install two horizontal braces.
- 13. Put frames of fourth storey and protect it with four cotters, brace it vertically.
- 14. On the last rungs of frame forth storey 2m install aluminium platform with plywood and pass-by platform next to.
- 15. See point 13 of 806 range- regarding fifth storey.
- 16. See point 6-8 of 802 range.

811 range

Points 1-15 are parallel to 810 range. 16. Next actions find at set 803 point 6-10.

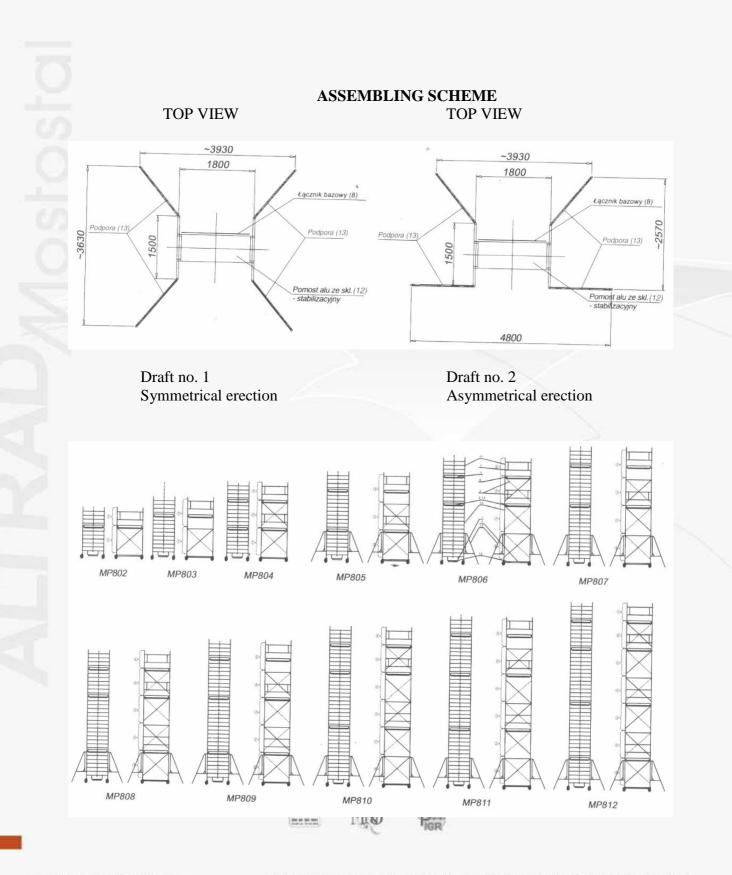
<u>812 range.</u>

Points 1-14 are parallel to 808 range.

- 15. Come into such formed platform and install two frames 2m of third storey and four cotters. Put vertical braces and complete protections i.e. four horizontal braces (on the height of 1,10m and 0,55 m over platform storey) and longitudinal and transverse curbs.
- 16. On the last frame rungs2m of third storey install two horizontal braces.
- 17. Put frames of fifth storey and protect it with four cotters, brace it vertically.
- 18. On the last rungs of frame fifth storey 2m install aluminium platform with plywood and pass-by platform next to.
- 19. Come into such formed protective platform and install two supporting frames 2m of sixth storey and four cotters. Install two vertical braces and two double railings as barriers. Around platform install longitudinal and transverse curbs.
- 20. See point 6-8 of 802 range.







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MP 1000

| Item of assem. scheme | Sym. | Scaffold Config. Element name | Weight (kg) | MP 1002 | MP 1003 | MP 1004 | MP 1005 | MP 1006 | MP 1007 | MP 1008 | MP 1009 | MP 1010 | MP 1011 | MP 1012 |
|-----------------------------|----------|---|----------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|----------------|----------------|----------------|
| 1 | MP -101 | Trolley beam 1,80m | 16,40 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2 | MP-106 | Stiffening coupler 2,85m | 11,50 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3 | MP-102 | Supporting frame 2,0x0,75m | 8,56 | 2 | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 | 12 |
| 4. | MP-103 | Front frame 1,10x0,75m | 5,13 | 2 | | 2 | | 2 | 1 | 2 | 1 | 2 | | 2 |
| 5 | MP-104 | Pass-by platform with flap 2,85x0,61m | 23,85 | 1 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 4 |
| 6 | MP-110 | Longitudinal curb 2,85m | 7,70 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 |
| 7 | MP-111 | Transverse curb 0,75m | 3,10 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 8 |
| 8 | MP-105 | Railing girder 2,85m | 11,10 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 9 | MP-107 | Horizontal brace 2,85m | 4,15 | 2 | 4 | 6 | 8 | 8 | 10 | 12 | 14 | 14 | 16 | 18 |
| 10 | MP-122 | Angle horizontal brace 2,95m | 7,62 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| 11 | MP-109 | Angle vertical brace 3,29m | 4,52 | 2 | 2 | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 |
| 12 | MP-114 | Regulated footing with two nuts 0,80m | 5,20 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 13 | MP-116 | Diameter castor | 4,75 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 14 | MP-112 | Spring cotter | 0,10 | 8 | 8 | 12 | 12 | 16 | 16 | 20 | 20 | 24 | 24 | 28 |
| | | Scaffold weight | | 220,5 | 231,6 | 313,3 | 320,2 | 339,9 | 355 | 436,8 | 443,6 | 463,3 | 478,5 | 560,2 |
| | | Working height Scaffold height | | 4,32 3,67 | 5,15 4,49 | 6,25 5,59 | 7,07 6,42 | 8,17 7,52 | 9,00 8,34 | 10,10 9,44 | 10,92 10,27 | 12,02 11,37 | 12,85 12,19 | 13,95 13,29 |
| | Operatio | onal platform height | | 2,32 | 3,15 | 4,25 | 5,07 | 6,17 | 7,00 | 8,10 | 8,92 | 10,02 | 10,85 | 11,95 |

Attention: Scaffold height was given for max. extension of regulated footing with castor. Height of mobile set amounts H=325mm.

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- 1. Stability of scaffold in dependence on their configuration (height), provided by their dead-load and stabilising ballasts.
- 2. Set of ballasts depending on scaffold configuration, variants of erection on diameter castor and of wind activity were presented below in the table. Stabilising ballasts should be put on thread pins of regulated footings. Ballasting weights MP-123 26 kg weigh form ballasts.

Table of ballasting scaffold MP 1000

Setting inside of building

Number of ballasting weights each 26 kg weigh.

| Scaffold | Operational | | Footi | ng setting | | |
|----------|---------------|-----------------|-----------------|-----------------|-----------------|--|
| type | platform | Variant I- s | ymmetrical | Variant II- as | ymmetrical | |
| | height [m] | | | | | |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" | |
| MP 1002 | 2,32 | Without ballast | Without ballast | Without ballast | Without ballast | |
| MP 1003 | 3,15 | Without ballast | Without ballast | Without ballast | Without ballast | |
| MP 1004 | 4,25 | Without ballast | Without ballast | Without ballast | 2 pcs. | |
| MP 1005 | 5,07 | Without ballast | Without ballast | Without ballast | 2 pcs. | |
| MP 1006 | 6,17 | Without ballast | Without ballast | Without ballast | 2 pcs. | |
| MP 1007 | 7,00 | 2 pcs. | 2 pcs. | Without ballast | 4 pcs. | |
| MP 1008 | 8,10 | 2 pcs. | 2 pcs. | Without ballast | 4 pcs. | |
| MP 1009 | 8,92 | 2 pcs. | 2 pcs. | Without ballast | 4 pcs. | |
| MP1010 | 10,02 | 2 pcs. | 2 pcs. | Without ballast | 6 pcs. | |
| MP 1011 | 10,85 | 4 pcs. | 4 pcs. | Without ballast | 6 pcs. | |
| MP 1012 | 11,95 | 4 pcs. | 4 pcs. | Without ballast | 6 pcs. | |

Setting outside of building

Number of ballasting weights each 26 kg weigh.

| Scaffold | Operational | | Footi | ng setting | | |
|----------|---------------|-----------------|-----------------|--------------------------|-----------------|--|
| type | platform | Variant I- s | ymmetrical | Variant II- asymmetrical | | |
| | height [m] | A B | | АВ | | |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" | |
| MP 1002 | 2,32 | Without ballast | Without ballast | Without ballast | Without ballast | |
| MP 1003 | 3,15 | Without ballast | Without ballast | Without ballast | 2 pcs. | |
| MP 1004 | 4,25 | 2 pcs. | 2 pcs. | Without ballast | 2 pcs. | |
| MP 1005 | 5,07 | 2 pcs. | 2 pcs. | Without ballast | 2 pcs. | |
| MP 1006 | 6,17 | 4 pcs. | 4 pcs. | 2 pcs. | 6 pcs. | |
| MP 1007 | 7,00 | 6 pcs. | 6 pcs. | 4 pcs. | 8 pcs. | |
| MP 1008 | 8,10 | 8 pcs. M | 8 pcs. | 6 pcs. | 10 pcs. | |
| MP 1009 | 8,92 | MARKEN 1 | impermissit | ole using scaffold | | |
| MP1010 | 10,02 | | | | | |
| MP 1011 | 10,85 | | | | | |

 type
 platform height [m]

 MP 1002
 2,32

 MP 1003
 3,15

 MP 1004
 4,25

 MP 1005
 5,07

 MP 1006
 6,17

 MP 1007
 7,00

 MP 1009
 8,92

 MP 1010
 10,02

 MP 1011
 10,85

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4.2. THE SEQUENCE OF ASSEMBLY

<u>1002 range.</u>

- 1. Take elements according to the set.
- 2. Join trolley beam with subassembly of castor and regulated footing through screw out top nut from thread pin of regulated footing and put into edge tube of trolley beam (1).
- 3. Subassembly of trolley beam and foot join one another with using stiffening coupler through put it on the pocket of seating foot into trolley beam.
- 4. Level trolley beam through screw or unscrew bottom nut, than set on top nut of foot into trolley beam.

Attention: After finishing the assembling of chassis you should put stabilising ballasts in accordance with ballasting table.

- 5. On the guiding tubes of trolley beam put supporting frame 2m of first storey and protect it with cotters.
- 6. Join frames with vertical braces. Braces should be crossed and placed on the opposite sides of construction.
- 7. Put platform with flap and curbs on the last frame rung of first storey.
- 8. Come into such formed operational platform and put front frame and two railing girders. Frame should be joined with cotters.

<u>1003 range.</u>

See points 1-6 of 1002 range.

- 7. On the last frame rung of first storey put horizontal brace.
- 8. Put supporting frame 2m of second storey on the guiding frame tubes of first storey and protect it with cotters.
- 9. On the third frame rung of second storey put platform with flap.
- 10. Come into such formed operational platform and put two railing girders. Than, put longitudinal and transverse curbs.

<u>1004 range.</u>

See points 1-8 of 1003 range.

- 9. Second storey of frames brace such as first storey. Braces of single side of construction should form zigzag.
- 10. On the last frame rung of second storey put platform with flap and curbs.



11. Come into such formed operational platform and put front frame and two railing girders. Frame should be joined with cotters.

1005 range.

See points 1-7 of 1002 range.

- 8. Come into such formed operational platform and put support frames 2m. frames should be joined with cotters.
- 9. Second storey of frames brace such as first and second storey. Braces of single side of construction should form zigzag.
- 10. Put horizontal braces on the second, fourth and on the last supporting frame rung 2m.
- 11. Put supporting frame 2m of third storey on the guiding tubes of second storey and protect it with cotters.
- 12. Put platform with flap on the third frame rung of third storey.
- 13. Come into such formed operational platform and put two railing girders. Than put longitudinal and transverse curbs.

1006 range.

See points 1-11 of 1005 range.

- 12. Third storey of frame brace such as first and second storey. Braces of single side of construction should form zigzag.
- 13. On the last frame rung of third storey put platform with flap and curbs.
- 14. Come into such formed operational platform and put front frames and two railing girders. Frames should be joined with cotters.

<u>1007 range.</u>

See points 1-10 of 1004 range.

- 11. Come into such formed operational platform and put front frames and two railing girders. Frames should be joined with cotters.
- 12. Third storey of frames brace such as first and second storey. Braces of single side of construction should form zigzag.
- 13. Put horizontal braces on the second, fourth and on the last supporting frame rung 2m.
- 14. Put supporting frame 2m of third storey on the guiding tubes of second storey and protect it with cotters.
- 15. Put platform with flap on the third frame rung of fourth storey.
- 16. Come into such formed operational platform and put two railing girders. Than put longitudinal and transverse curbs.

<u>1008 range.</u>

See points 1-14 of 1007 range.

- 15. Fourth storey of frame brace such as first and second storey. Brace of single side of construction.
- 16. Put platform with flap and curbs on the last frame rung of fourth storey .
- 17. Come into such formed operational platform and put front frames and two railing girders. Frames should be joined with cotters.

<u>1009 range.</u>

See points 1-13 of 1006 range.

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- 14.Come into such formed operational platform and put supporting frames 2m. Frames should be joined with cotters.
- 15. Fourth storey of frame brace such as first and second storey. Brace of single side of construction should form zigzag.
- 16.Put horizontal braces on the second, fourth and on the last supporting frame rung 2m.
- 17. Put supporting frame 2m of fifth storey on the guiding tubes of fourth storey and protect it with cotters.
- 18. Put platform with flap on the third frame rung of fifth storey.
- 19. Come into such formed operational platform and put two railing girders. Than put longitudinal and transverse curbs.

<u>1010 range.</u>

See points 1-17 of 1009 range.

- 18. Fifth frame storey brace such as first and second storey. Brace of single side of construction should form zigzag.
- 19. Put platform with flap and curbs on the last frame rung of fifth storey.
- 20. Come into such formed operational platform and put front frames and two railing girders. Frames should be joined with cotters.

1011 range

See points 1-16 of 1008 range.

- 17. Come into such formed operational platform and put supporting frames 2m. Frames should be joined with cotters.
- 18. Fifth frame storey brace such as first and second storey. Brace of single side of construction should form zigzag.
- 19. Put horizontal braces on the second, fourth and on the last supporting frame rung 2m.
- 20. Put supporting frame 2 m of third storey on the guiding tubes of second storey and protect it with cotters.
- 21. Put platform with flap on the third frame rung of sixth storey.
- 22. Come into such formed operational platform and put two railing girders. Than put longitudinal and transverse curbs.

<u>1012 range.</u>

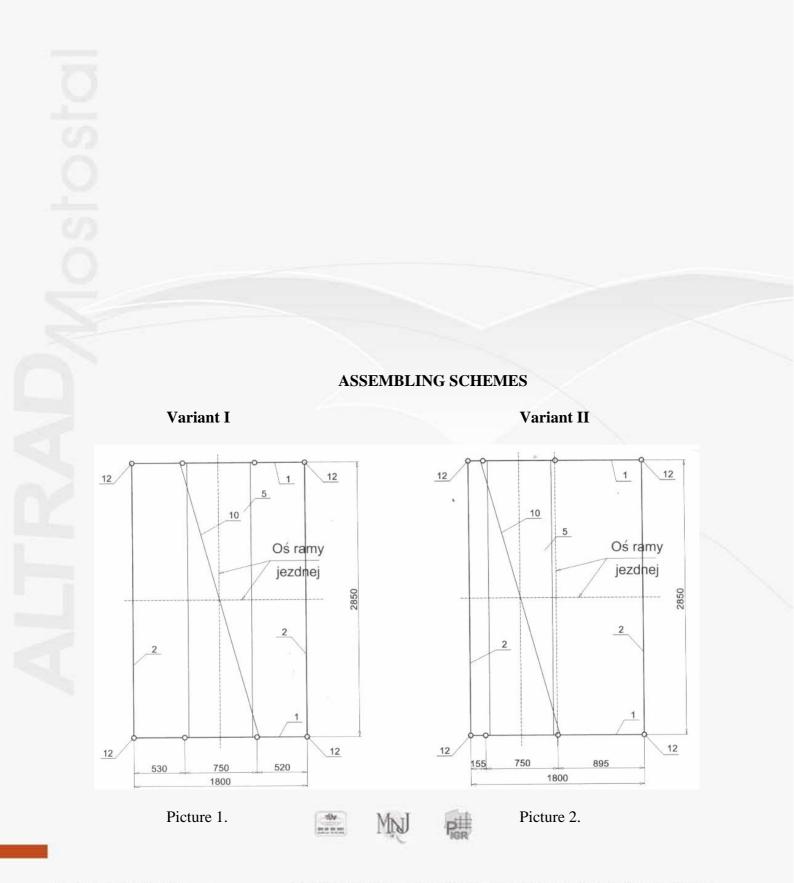
See points 1-20 of 1011 range.

- 21. Sixth frame storey brace such as first and second storey. Brace of single side of construction should form zigzag.
- 22. Put platform with flap and curbs on the last frame rung of sixth storey.

23.Come into such formed operational platform and put front frames and two railing girders. Frames should be joined with cotters.



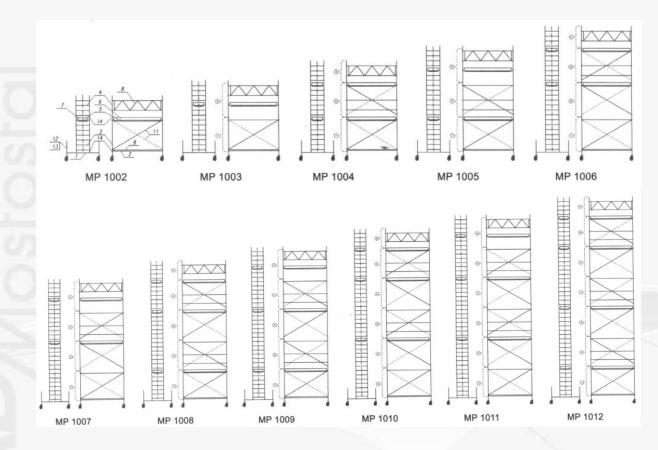




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MP 2000

5.1. Configurations and stability of scaffold MP 2000 type.

| | | The second se | /ariant I | without | beam | | |
|-----------------------|--------|---|-------------------|-----------------|--------|---------|---------|
| Item of assembling | Symbol | Scaffolding configuration | Element weight | MP 2002 | MP2003 | MP 2004 | MP 2005 |
| scheme | | Element name | [kg/pc] | | | | |
| 3. | MP-126 | Support frame 2,0x1,50m | 13,04 | 2 | 4 | 4 | 6 |
| 4. | MP-127 | Front frame 1,10x1,50m | 7,64 | 2 | | 2 | |
| 5. | MP-104 | Pass-by platform with flap 2,85x0,61m | 23,85 | 1 | 1 | 2 | 2 |
| 6. | MP-115 | Aluminium platform with plywood 2,85x0,61m | 23,50 | 2 | 2 | 3 | 3 |
| 7. | MP-110 | Longitudinal curb 2,85m | 7,70 | 2 | 2 | 4 | 4 |
| 8. | MP-124 | Transverse curb 1,50m | 4,55 | 2 | 2 | 4 | 4 |
| 9. | MP-105 | Railing girder 2,85m | 11,10 | 2 | 2 | 2 | 2 |
| 10. | MP-107 | Horizontal brace 2,85m | 4,15 | | | 4 | 6 |
| 11. | MP-109 | Angle vertical brace 3,29m | 4,52 | 2 | 2 | 4 | 4 |
| 12. | MP-125 | Base coupler 2,85m | 7,40 | 1 | 1 | 1 | 1 |
| 13. | MP-108 | Bottom platform frame 0,70m | 3,14 MNJ | | 2 | 2 | 2 |
| 15 | MP-138 | Regulated footing with nut and screw | 4,81 | 4 ^{GR} | 4 | 4 | 4 |
| 16 | MP-116 | Diameter castor | 4,75 | 4 | 4 | 4 | 4 |

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| 17. | MP-112 | Spring cotter | 0,10 | 4 | 4 | 8 | 8 |
|-----|--------|----------------------|------|-------|--------|--------|-------|
| | | Scaffold weight [kg] | | 220,3 | 231,10 | 344,20 | 363,0 |
| | | | 4,17 | 5,00 | 6,10 | 6,92 | |
| | | | 3,51 | 4,34 | 5,44 | 6,26 | |
| | Opera | | 2,17 | 3,00 | 4,10 | 4,92 | |

| <u></u> | ~ ~ ~ | | ariant | | , v | | | | | | | |
|----------------------|--------------------------------------|--|----------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Item of | Symbol | Scaffolding configuration | Eleme | MP |
| assembling scheme | | Element name | nt weight [kg] | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
| 1. | MP-128 | Trolley beam | 49,19 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2. | MP-106 | Stiffening coupler 2,85m | 11,50 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 3. | MP-126 Supporting frame 2,0x1,50m | | 13,04 | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 | 12 |
| 4. | MP-127 | Front frame 1,50x1,10m | 7,64 | | 2 | | 2 | | 2 | | 2 | |
| 5. | MP-104 | Pass-by platform with flap 2,85x0,61m | 23,85 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 |
| 6. | MP-115 | Aluminium platform with plywood 2,85x0,61m | 23,5 | 2 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 |
| 7. | MP-110 | Longitudinal curb 2,85 m | 7,70 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 |
| 8. | MP-124 Transverse curb 1,50m | | 4,55 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 |
| 9. | MP-105 | Railing girder 2,85m | 11,10 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 10. | MP-107 | Horizontal brace 2,85m | 4,15 | | 4 | 6 | 6 | 8 | 10 | 12 | 12 | 14 |
| 11. | MP-109 | Angle vertical brace 3,29m | 4,52 | 2 | 4 | 4 | 6 | 6 | 8 | 8 | 10 | 10 |
| 14. | MP-114 | Regulated footing with two nuts | 5,20 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 16. | MP-116 | Diameter castor | 4,75 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| 17. | MP-112 | Spring cotter | 0,10 | 8 | 12 | 12 | 16 | 16 | 20 | 20 | 24 | 24 |
| | | Scaffold weight [kg] | | 340,7 | 453,9 | 473,0 | 497,7 | 516,8 | 621,7 | 640,8 | 665,5 | 684,6 |
| | | Working height [m] | | 5,15 | 6,25 | 7,08 | 8,17 | 9,00 | 10,10 | 10,93 | 12,02 | 12,85 |
| | | Scaffold height [m] | | 4,49 | 5,60 | 6,42 | 7,52 | 8,34 | 9,45 | 10,27 | 11,37 | 12,19 |
| | Oper | ational platform height [m] | | 3,15 | 4,25 | 5,08 | 6,17 | 7,00 | 8,10 | 8,93 | 10,02 | 10,85 |

Variant II with trollev beam

- 1. Stability of scaffold depended on their configuration (height), is provided by their dead-weight and stabilising ballasts.
- 2. Set of ballasts depended on scaffold configuration and version of extension beam were presented in the below tables.
- 3. Put ballasts on the stabilising platform and on the thread pins of regulated footings: stable, mobile (that cooperates with mobile part of beam) (variants with trolley beam), using ballasting weights MP –123 in the same moment of making trolley chassis (before next sequence), according to the below ballasting tables. Load of one ballasting weight amounts 26 kg.



Attention: Scaffold height was given for max. extension of regulated footing with castor. Height of one mobile set amounts H=325mm.

<u>Ballasting table of scaffolding MP 2000 without trolley beam</u> Erection inside of building

Number of ballasting weights each 26 kg weigh.

| Scaffold | Operational | Scaffold | setting |
|----------|-------------|---------------------------------|------------------------|
| type | platform | Close space | Open space |
| | height [m] | | |
| | | Ballasts placed on the platform | Ballasts placed on the |
| | | | platform |
| MP 2002 | 2,32 | Lack of ballast | Lack of ballast |
| MP 2003 | 3,15 | Lack of ballast | 2 pcs. |
| MP 2004 | 4,25 | Lack of ballast | 4 pcs. |
| MP 2005 | 5,07 | Lack of ballast | 9 pcs. |
| MP 2006 | 6,17 | 2 pcs. | 12 pcs. |

Ballasting tables of scaffold MP 2000 with trolley beam Setting inside of building

Number of ballasting weights each 26 kg weigh.

| Scaffold | Operational | | Footing s | setting | |
|----------|-------------|-----------------|-----------------|-----------------|-----------------|
| type | platform | Variant I- beam | is sided down | Variant II- l | beam spaced |
| | height [m] | | | | B |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" |
| MP 2002 | 2,32 | Without ballast | without ballast | without ballast | without ballast |
| MP 2003 | 3,15 | Without ballast | without ballast | without ballast | without ballast |
| MP 2004 | 4,25 | Without ballast | without ballast | without ballast | without ballast |
| MP 2005 | 5,07 | Without ballast | without ballast | without ballast | without ballast |
| MP 2006 | 6,17 | Without ballast | without ballast | without ballast | without ballast |
| MP 2007 | 7,00 | Without ballast | without ballast | without ballast | without ballast |
| MP 2008 | 8,10 | Without ballast | without ballast | without ballast | without ballast |
| MP 2009 | 8,92 | Without ballast | without ballast | without ballast | without ballast |



| MP 2010 | 10,02 | Without ballast | without ballast | without ballast | without ballast |
|---------|-------|-----------------|-----------------|-----------------|-----------------|
| MP 2011 | 10,85 | Without ballast | without ballast | without ballast | without ballast |
| MP 2012 | 11,95 | Without ballast | without ballast | without ballast | without ballast |

Outside of building erection

Number of ballasting weights each 26 kg weigh

| Scaffold | Operational | | Footing s | setting | |
|----------|-------------|------------------|-----------------|-----------------|-----------------|
| type | platform | Variant I- syn | nmetrical | Variant II- as | symmetrical |
| | height [m] | | в | | в |
| | | Edge "A" | Edge "B" | Edge "A" | Edge "B" |
| MP 2002 | 2,32 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 2003 | 3,15 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP2004 | 4,25 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 2005 | 5,07 | Without ballast | Without ballast | Without ballast | Without ballast |
| MP 2006 | 6,17 | Without ballast | 2 pcs. | Without ballast | Without ballast |
| MP 2007 | 7,00 | Without ballast | 3 pcs. | Without ballast | Without ballast |
| MP 2008 | 8,10 | Without ballast | 4 pcs. | Without ballast | Without ballast |
| MP2009 | 8,92 | impermissible us | sing scaffold | 1 | |
| MP 2010 | 10,02 | | | | |
| MP 2011 | 10,85 | | | | |
| MP 2012 | 11,95 | 16 | | <u></u> | |

5.2. THE SEQUENCE OF ASSEMBLING.

2002 range(without beam)

- 1. Take elements according to the set.
- 2. Screw down the bottom platform frame.
- 3. Put system of castors with regulated screw into vertical frame tube.
- 4. Set frames vertically and install aluminium platform with plywood on the bottom platform frame. Such erected settlement join with vertical braces.
- 5. Level construction through regulating nuts. Nuts should be max. screwed out on the bolt. Before turn protect nuts with screwing butterfly screw into the hole of supporting frame 2m. Supporting frame join with base coupler as low as it is possible on the vertical tubes of bottom platform frames.
- 6. Operational platform put on the last frame rung 2m.
- 7. Come into such formed operational platform and put front frames and two railing girders. Frames should be joined with cotters.

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2003 range (without trolley beam)

See point 1-5 of 2002 range.

- 6. Frame 2m of second storey put on guiding frame tube of first storey.
- 7. Operational platform put on the last frame rung 2m.
- 8. Come into such formed operational platform and put two railing girders. Put longitudinal and transverse curbs.

2004 range (without trolley beam)

See point 1-5 of 2002 range.

- 6. On the last frame rung of first storey put protective platform with curbs.
- 7. Build over the second storey according to the picture.
- 8. Put operational platform on the last frame rung of second storey. From the operational platform on the second storey build over third storey according to the picture.

2005 range (without beam)

See point 1-5 of 2002 range.

- 6. Put two horizontal braces on the last frame rung of first storey.
- 7. Build over the second storey according to the picture (protective platform on the third rung from the bottom frames of second storey).
- 8. Being on the protective platform of second storey build third storey according to the picture (operational platform on the third rung from the bottom frames of third storey).

2003 range (with trolley beam)

- 1. Take elements according to the set..
- 2. Screw down system of castor with regulated screw to the trolley beam.
- 3. Put stiffening coupler on the vertical beam tubes.
- 4. Put aluminium platform with plywood and extend max. mobile arms of beams. Level construction through regulating nut. Nuts should be screwed max. on the bolds. Extend support of stable beam.
- 5. Put two frames 2m of first storey on the guiding tubes of trolley beam and protect it with spring cotters.
- 6. Such assembled range join with vertical braces. Braces should be crossed and situated on the opposite sides of construction.
- 7. Put frames 2m long of second storey on the frames of first storey and protect it with spring cotters.
- 8. Put operational platform on the third frame rung of second storey.
- 9. Come into such formed operational platform and put two railing girders. Than put longitudinal and transverse curbs.

2004 range (with trolley beam)

See point 1-6 of 2003 range (with trolley beam).

- 7. Put protective platform with curbs on the last frame rung of first storey.
- 8. Build over the second storey according to the picture.
- 9. Put operational platform on the last frame rung of second storey. Being on the operational platform of second storey assembly third storey according to the picture.

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2005 range (with trolley beam).

See point 1-6 of 2003 range (with trolley beam).

- 7. Put two horizontal braces on the last frame rung of first storey.
- 8. Build over the second storey according to the picture.
- 9. Being on the protective platform of second storey build third storey according to the picture (operational platform on the third rung from the bottom frames of third storey).

2006 range (with trolley beam)

See point 1-6 2003 range(with trolley beam).

- 7. Put two horizontal braces on the last frame rung of first storey.
- 8. On the frame of first storey build over third storey (operational platform on last frame rung of third storey).
- 9. Being on the protective platform of second storey build over third storey (operational platform on the last frame rung of third storey).
- 10. Being on the operational platform of third storey build over fourth storey according to the picture.

2007 range (with trolley beam)

See points 1-8 of 2006 range (with trolley beam).

9. Being on the protective platform of second storey build over third storey according to the picture and fourth storey (operational platform on the third rung from the bottom frame of fourth storey).

2008 range (with trolley beam)

See points 1-6 of 2003 range (with trolley beam).

- 7. Put static platform with curbs on the last frame rung of first storey.
- 8. Being on the static platform of first storey build over second storey and third storey according to the picture (protective platform on the last frame rung of third storey).
- 9. Being on the protective platform of third storey build over fourth storey (operational platform on the last frame rung from the bottom frame of fifth storey).

2009 range (with trolley beam)

See points 1-8 of 2006 range.

9. Being on the protective platform of third storey build over fourth storey according to the picture and fifth storey (operational platform on the third rung from the bottom frame of fifth storey).

2010 range (with trolley beam)

See points 1-8 of 2006 range.

9.Being on the static platform of second storey build over second storey and third storey according to the picture (protective platform on the last frame rung of third storey).

10. Being on the protective platform of fourth storey build over fifth storey (operational platform on the last frame rung of fifth storey).

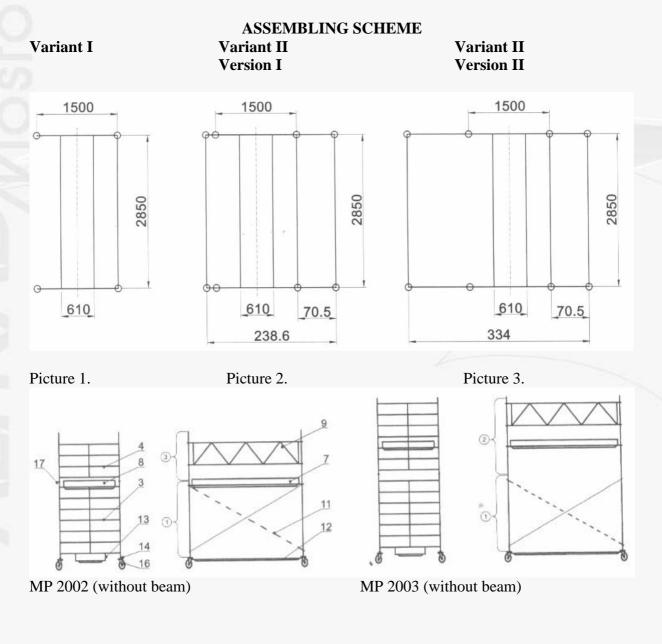


11. Being on the operational platform of fifth storey build over sixth storey according to the picture.

2011 range (with trolley beam)

See 1-9 of 2010 range (with trolley beam).

10. Being on the protective platform of fourth storey build over fifth storey according to the picture and sixth storey (operational platform on the third frame rung from the bottom frame of sixth storey).

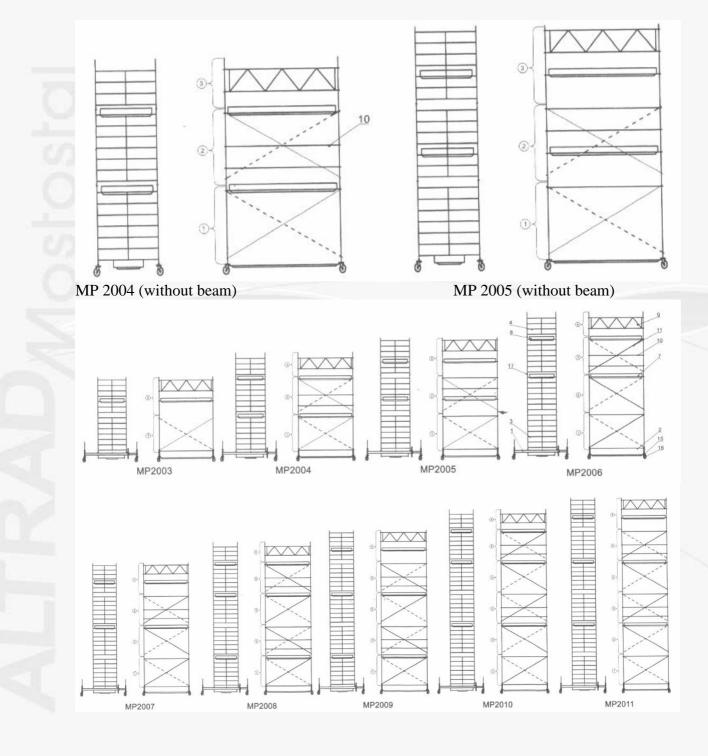




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