Layher Railing clamp Instructions for Assembly and Use

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CONTENTS

1.	General information2
2.	Introduction
3.	Description5
4.	Assembly6
5.	Dismantling7
6.	Components8
7.	Certificate10
8.	Notes

NOTE

The products or assembly variants shown in these instructions for assembly and use may be subject to country-specific regulations. The user of the products bears the responsibility for compliance with such regulations. Subject to local regulations, we reserve the right not to supply all the products illustrated here.

Your Layher partner on the spot will be happy to provide advice and answers to all questions relating to the products, to their use or to specific assembly regulations.

All dimensions and weights are guideline values. Subject to technical modification.

▶ 1. GENERAL INFORMATION

When assembling and using the Layher Railing clamp, the Instructions for Assembly and Use of Layher Allround or Layher SpeedyScaf equipment must also be followed. Knock all wedges in with a 500 g metal hammer until the blow bounces.

Before assembly, check all components to ensure they are in perfect condition. Only use undamaged original parts.

After a fall of a person or of an object against or into the side protection system or its accessory parts, the side protection must be inspected by an expert before it is used again.

Flat roof guard rails may only be assembled and dismantled by personnel familiar with the Instructions for Assembly and Use of the systems used.

The components must not be subjected to any aggressive substances.

Check the load-bearing capacity of the anchoring foundation for the Railing clamp

> 2. INTRODUCTION

General

These instructions for assembly and use relate to assembly, modification and dismantling of the main assembly variants of the Railing clamp using SpeedyScaf or Allround scaffolding components from Wilhelm Layher GmbH & Co. KG, of Güglingen-Eibensbach, Germany, as a temporary side protection. The instructions cannot cover all the possible applications. Detail on assembling SpeedyScaf or Allround scaffolding components are provided in the appropriate instructions for assembly and use. If you have any questions about specific applications, please contact your Layher partner.

Only original Layher components may be used for assembly.

Visually check all components prior to installation and before they are used to ensure that they are in flawless condition. Do not use damaged components.

Caution: Assembly, alteration and dismantling of the overall structure involve risk of falls. Perform construction work in such a way that the risk of falls is avoided as far as possible and that the residual risk is minimized. Assembly situations where there is a risk of falls are identified in these instructions with the following symbol inside the assembly pictures.



The side protection erector must stipulate, on the basis of how he assesses the risk, suitable measures to prevent or minimize risks for the specific case and/or for the respective activities involved.

The measures must be selected with due consideration of the actual risk, their usefulness and their practical possibilities, and also depending on

- the qualification of the employees,
- the type and duration of the activity in the high-risk area,
- the possible fall height,
- the state of the surface onto which the employee might fall and
- the state of the workplace and its access.

Suitable measures to prevent risks can be:

- The employment of personnel instructed about the specific risk situation
- The use of personal safety apparatus (PSA)

If personal safety apparatus (PSA) is required for assembly work or is specified by local regulations, DIN EN 795 "Protection against falls – attachment points" must be complied with.

Before the start of construction work, the contractor must ascertain whether the planned working area contains equipment that might endanger the employees.

Assembly, modification and dismantling may only be performed with appropriate protective equipment. Components must not be thrown; instead they must be handed over in such a way that they cannot slip or be dropped.

Every use of the temporary side protection system must be preceded by a check that it is in good condition.

With regard to the following instructions for assembly and use of the Railing clamp, it must be pointed out that as a general principle temporary side protection systems may only be assembled, modified or dismantled under the supervision of a qualified person and by technically trained employees adequately and specifically instructed in this work. To that extent, and with regard to use, we refer to the required conditions set forth in German Ordinance on Industrial Safety and Health (BetrSichV). In the following instructions for assembly and use, we provide the erector and the user, on the basis of our risk analysis, with advice on how to comply with the requirements of the Ordinance in the respective assembly situation.

The technical details set forth in the instructions for assembly and use are intended to help the erector and/or user to comply with the requirements of the Ordinance and are not mandatory specifications for them. The erector/user must take the measures needed on the basis of the risk assessment, prepared according to the preconditions of the Ordinance, at his own discretion and exercising all due care and diligence. The specific features of the individual case must be taken into account here.

It is essential that the following instructions for assembly and use are complied with in every case. It is pointed out that all information, particularly that regarding stabilization of the assembly variants, applies only when original Layher components are used. The installation of non-Layher parts can lead to safety defects and insufficient stability.

The present instructions for assembly and use must be available to the supervisor and to the employees involved.

During assembly, modification and dismantling, as well as during use, the legal regulations of the German Ordinance on Industrial Safety and Health (BetrSichV) concerning the erection and use of temporary side protection systems must be complied with.

Inspection and documentation

The overall structure (Railing clamp with SpeedyScaf or Allround components) must, whenever it has been assembled and before it is put into service, be inspected by persons qualified to do so. The inspection must be documented. If certain areas are not ready for use, particularly during assembly, modification and dismantling, they must be identified with a prohibitory sign indicating "no entry". In addition, it must be made clear by barriers that the temporary side protection has not been completed and hence the site must not be entered.



Use

The user must check that the temporary side protection is suitable and safe to use for the work to be performed (Section 4 of BetrSichV). He must ensure that the overall structure is checked for obvious defects before use. If defects are found during this check, the overall structure must not be used in those areas where there are defects until these have been eliminated by the erector. Subsequent alterations are deemed as assembly, modification or dismantling and may only be performed by technically trained employees. They must be inspected and approved by the erector.

The legal regulations of the German Ordinance on Industrial Safety and Health (BetrSichV) must be complied with.

A detailed list of articles can be found in our catalogue.

3. DESCRIPTION

According to German regulations BGV C 22 relating to construction work, a fall protection system must be provided for work areas and walkways on roofs and intermediate levels where the height of the fall is more than 2.0 m.

The Layher Railing clamp meets this requirement for securing of concrete floors and fascias of 16 to 33 cm height and of flat roofs up to a building height of 40 m.

The temporary side protection must be constructed in accordance with EN 13374 "Temporary edge protection systems". The Railing clamp corresponds to protection class A and is designed such that it only withstands static loads generally meeting the following requirements:

- Supporting of a person leaning on the side protection or offering support when a person grips the side protection while moving along it.
- Catching a person hitting or falling against the side protection.

The bay widths can be freely selected, up to 3.07 m. The side protection can be quickly and easily built with either Layher Allround equipment or Layher SpeedyScaf equipment.

The safety of the structure is documented by the DGUV test mark (from the inspection office of the German Statutory Accident Insurance (DGUV).

Diagram



4. ASSEMBLY

Note: The item numbers listed here relate to the listed components in Section 6 on Components (see page 8).

Bay assembly

Lay out the Railing clamps depending on the bay configuration on the roof or interim floor, and attach them to the floor or fascia. Fasten the Railing clamps by tightening the spindle nut. Then lock the spindle nut using the wing screw – when used on the floor, the wing screw must not be locked until the standard has been fitted.





In the next step, fit the Allround standards 7 or SpeedyScaf guardrail standard 2 onto the spigot (when used on the fascia) or onto the spindle (when used on the floor). Now connect the standards to one another using Allround O-ledgers 8 or SpeedyScaf guardrails 3 (optionally using SpeedyScaf double guard rails 5).

Assemble the remaining bays using the same sequence.

Example of use on the floor



When used on the floor, fit the Railing clamp as shown in the adjacent picture. Fit Allround standards 7 or SpeedyScaf guard rail standards 2 over the spindles and lock them using the wing nut. Then attach toe boards 6 by fitting them over the toe board pin of the upper clamping jaw.

Example of use on the fascia



When used on the fascia, the Railing clamp must be fitted as shown in the adjacent picture. Fit Allround standards 7 or SpeedyScaf guardrail standards 2 over the spigot. Toe boards are not necessary for fastening to the fascia and can be dispensed with.

Fig. 6

Corner design with Layher Allround



Assemble the guardrail corners exactly like the straight bays. A 1.0 m Allround standard 7 acts as the corner post to which the Allround ledger 8 is attached. For fitted bays, the adjustable Allround guard rail 9 can be used.

Corner design with Layher SpeedyScaf





When designing corners using Layher SpeedyScaf equipment, a guardrail 2 acts as the corner post. Ensure here that a corner bay is constructed with adjustable SpeedyScaf guardrails 4. In this case, fold the guardrail lug with joint inwards and wedge it at the guard rail wedge housing of the corner post.

Fig. 9

5. DISMANTLING

The side protection is dismantled in the same way as it is assembled but in the reverse sequence.

▶ 6. COMPONENTS



4015.100 Railing clamp

of steel. For use on roofs, interim floors and fascias. Weight 7.0 kg



1728.xxx SpeedyScaf double guardrail

of steel. 1.57 to 3.07 m long.

Length [m]	Height [m]	Weight [kg]	RefNo.
1.57	0.5	7.9	1728.157
2.07	0.5	9.8	1728.207
2.57	0.5	11.7	1728.257
3.07	0.5	14.1	1728.307



1732.xxx SpeedyScaf double guardrail

of aluminium. 1.57 to 3.07 m long.

Length [m]	Height [m]	Weight [kg]	RefNo.
1.57	0.5	3.5	1732.157
2.07	0.5	4.6	1732.207
2.57	0.5	5.8	1732.257
3.07	0.5	6.7	1732.307

3

1725.xxx SpeedyScaf guardrail

of steel. 1.57 to 3.07 m long.

Length [m]	Weight [kg]	RefNo.
1.57	2.9	1725.157
2.07	3.8	1725.207
2.57	4.7	1725.257
3.07	5.6	1725.307

4

1726.000 SpeedyScaf guardrail, adjustable

of steel. Adjustment range 1.57 to 2.57 m.

6

Layher. 🖾

1757.xxx Toe board

1.57 to 3.07 m long.

Length [m]	Weight [kg]	RefNo.
1.57	3.1	1757.157
2.07	4.7	1757.207
2.57	5.6	1757.257
3.07	6.8	1757.307



2604.100 Allround standard of steel, without spigot, 1.00 m long.

2607.xxx Allround O-ledger

of steel. 1.57 to 3.07 m long.

Lenght [m]	Weight [kg]	RefNo.
1.57	5.9	2607.157
2.07	7.8	2607.207
2.57	9.7	2607.257
3.07	11.4	2607.307

3201.xxx Allround aluminium O-ledger

of aluminium. 1.57 to 3.07 m long.

Lenght [m]	Weight [kg]	RefNo.
1.57	4.0	3201.157
2.07	4.5	3201.207
2.57	4.9	3201.257
3.07	5.5	3201.307



2606.000 Allround guardrail, adjustable of steel. Adjustment range 1.57 to 2.57 m.

7. CERTIFICATE

Prüf- und Zertifizierungsstelle Bescheinigung Fachausschuss Bauweser Nr. BAU/TB 11095-DGUV 13.04.2011 vom **DGUV Test Prüfbescheinigung** Wilhelm Layher GmbH & Co. KG Name und Anschrift des Bescheinigungsinhabers: Ochsenbacher Straße 56 (Auftraggeber) D-74363 Güglingen-Eibensbach Name und Anschrift des Wilhelm Layher GmbH & Co. KG Ochsenbacher Straße 56 Herstellers: D-74363 Güglingen-Eibensbach Produktbezeichnung: Seitenschutz Brüstungsklammer (DIN EN 13374-A) Typ: Bauteil für die temporäre Absturzsicherung an Dachflächen mit Bestimmungsgemäße Verwendung: Attika und an Betondecken Prüfgrundlage: GS-BAU 01 - Ausgabe Januar 2009 GS-BAU 21 - Ausgabe April 2003 BGI 807 - Ausgabe Oktober 2002 Zugehöriger Prüfbericht: DOK 622.82-Lay 4 Aufbau- und Verwendungsanleitung beachten Einsatz bis 40 m Höhe über Gelände Bemerkungen/ Zeichenzusatz: Ersetzt die Prüfbescheinigung 01004-GS vom 16.01.2006 Das geprüfte Baumuster entspricht den zurzeit geltenden Sicherheits- und Gesundheitsanforderungen in der Bundesrepublik Deutschland. Der Bescheinigungsinhaber ist berechtigt, das umseitig abgebildete DGUV Test-Zeichen an den mit dem geprüften Baumuster übereinstimmenden Produkten sofern zutreffend mit dem oben genannten Zeichenzusatz. Diese Bescheinigung einschließlich der Berechtigung zur Anbringung des DGUV Test-Zeichens ist gültig bis: 12.04.2016 Weiteres über die Gültigkeit, eine Gültigkeitsverlängerung und andere Bedingungen regelt die Prüf- und Zertifizierungsordnung vom September 2010. Dipl.-Ing. Univ. R. Hartdegen Der Leiter der Prüf- und Zertifizierun etalle Fachausschuss Bauwesen • Prüf- und Zertifizierungsstelle im DGUV Test • Landsberger Str. 309 • 80687 München Telefon: 089 8897 - 858 • Telefax: 089 8897 - 859 • E-Mail: p-z-8@bgbau.de • Internet: www.bgbau.de 508.03-Schutzwände in Gerüst PZB07 07,10 0029

8. NOTES



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