

LAYHER PROTECT SYSTEM

THE LOW-COST, LABOUR-SAVING ENCLOSURE FOR ENVIRONMENT, NOISE AND WEATHER PROTECTION



With the **Protect System**, Layher can supply a cassette enclosure system which is compatible with the Layher Allround Scaffolding and SpeedyScaf systems and which meets requirements concerning environmental protection and insulation from noise and weather. **It is an exceptionally economical solution which boasts Layher's renowned quality:**

- ▶ **Only a small number of individual parts, designed for frequent, changing applications.**
- ▶ **Rapid, easy assembly in a simple, logical sequence.**
- ▶ The cassettes are designed for Layher axis dimensions (max. width: 3.07 m) and, with a height of 1.00 m, are very simple to assemble and move into the scaffolding.
- ▶ The surrounding rubber seal makes the cassette elements almost dustproof (**facade coating**), vacuum-compatible (**removal of asbestos**), waterproof (**sandblasting work**).
- ▶ Electrostatically inert and therefore easy to clean.
- ▶ The wall cassettes can be used with a dimension of **airborne sound insulation** of $R_w' = 26$ dB.

- ▶ **Light cassettes** permit work in daylight conditions within the enclosure.
- ▶ Cassette elements exist for **external and internal corners**.
- ▶ A specially developed **connection rail** is used to establish a connection with the existing building or the ground.
- ▶ Practical solutions for horizontal and vertical dimension compensation are available.
- ▶ The anchoring layout corresponds to that of scaffolding which is clad with tarpaulins.
- ▶ **Access elements** compatible with system and individual requirements are available.

Layher Protect System:

A system which meets all environmental and safety requirements and prevents all risks. The individual components of the Protect System can only be supplied ex works from Eibensbach. Metric bay lengths can be ordered subject to delivery times.

YOUR BENEFITS AT A GLANCE

- ▶ Requirements of environmental, sound and weather protection are fulfilled.
- ▶ Rapid, easy assembly in a simple, logical sequence.
- ▶ The all-round rubber seal makes the cassette elements almost dustproof (facade coating), vacuum-compatible (removal of asbestos), waterproof (sandblasting work).
- ▶ Only few and optical attractive components, designed for frequently changing applications.
- ▶ Fully combinable to Layher Allround Scaffolding and Layher SpeedyScaf.

Cassette elements

Frames made from aluminium sections with galvanized sheet steel inserts. A surrounding rubber seal provides a clean, precise connection to neighbouring elements.

The **wall cassettes 1** can be used with a dimension of airborne sound insulation of $R_w' = 26$ dB.

On request, it is also possible to supply special wall cassette variants with enhanced sound isolation properties in accordance with the "Supplementary Technical Requirements and Guidelines for Highway Noise Insulation Walls" ZTV-Lsw 88:1988 and the evaluation in accordance with DB guideline 800.2001, section 2.

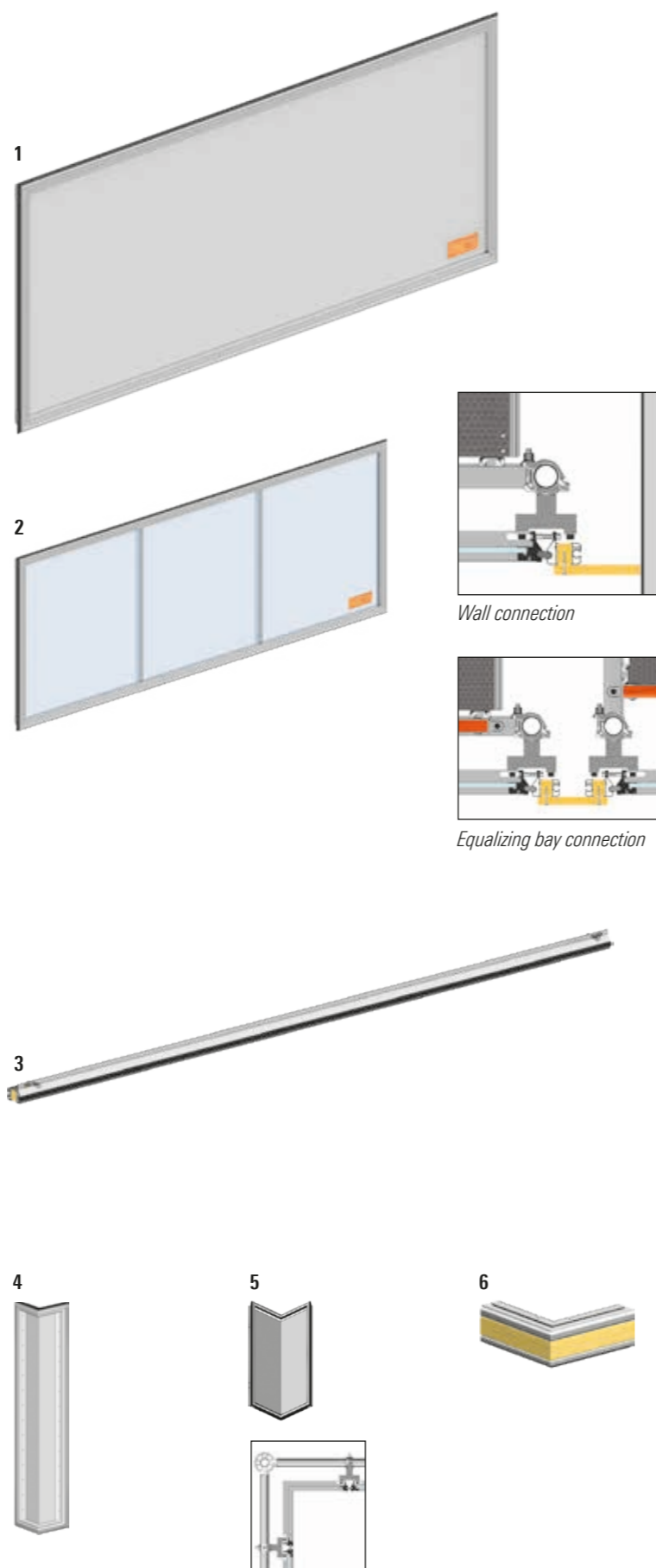
A test report concerning the airborne sound insulation of scaffolding coverings issued by the Fraunhofer Institute for Building Mechanics in accordance with ZTV-Lsw 88:1988 or DB guideline 800.2001 is available.

Thanks to the use of **light cassettes 2**, it is possible to work in daylight conditions behind the enclosure. In this case, a translucent plastic web plate replaces the steel plate in the aluminium section frame.

Connection rails 3 close the enclosure at the ground or building. These are clamped to the cassettes and make it possible to pull a Keder tarpaulin into the built-in Keder groove. Alternatively, a sheet or board can be adapted for use with the wooden strip intended for this purpose. Connection rails also permit the clean, close-fitting connection of fitted bays.

Internal and external corners are formed using **corner cassettes 4**, while the corresponding **connection rails 3**, which are inserted in the holder, permit a close-fitting connection to the neighbouring cassettes and close the system both visually and in functional terms.

Corner elements with other angles upon request.



| Pos. | Description | Dimensions L/H x W [m] | Weight approx. [kg] | PU [pcs.] | Ref. No. | | | |
|--------------------------------|--------------------------------------|------------------------|---|-------------|-------------------|-------------------|-------------------|-------------------|
| 1 | Wall cassette | 0.73 m long | 0.73 x 1.00 | 7.7 | 15 | 5980.073 🏠 | | |
| | | 1.09 m long | 1.09 x 1.00 | 10.5 | 15 | 5980.109 🏠 | | |
| | | 1.57 m long | 1.57 x 1.00 | 14.3 | 15 | 5980.157 🏠 | | |
| | | 2.07 m long | 2.07 x 1.00 | 18.2 | 15 | 5980.207 🏠 | | |
| | | 2.57 m long | 2.57 x 1.00 | 22.2 | 15 | 5980.257 🏠 | | |
| | | 3.07 m long | 3.07 x 1.00 | 27.2 | 15 | 5980.308 🏠 | | |
| | Wall cassette, metric | 0.50 m long | 0.50 x 1.00 | 6.0 | 15 | 5980.050 ⌚ | | |
| | | 1.00 m long | 1.00 x 1.00 | 10.0 | 15 | 5980.100 ⌚ | | |
| | | 1.50 m long | 1.50 x 1.00 | 14.0 | 15 | 5980.150 ⌚ | | |
| | | 2.00 m long | 2.00 x 1.00 | 18.0 | 15 | 5980.200 ⌚ | | |
| | | 2.50 m long | 2.50 x 1.00 | 22.0 | 15 | 5980.250 ⌚ | | |
| | | 3.00 m long | 3.00 x 1.00 | 27.0 | 15 | 5980.301 ⌚ | | |
| | | 2 | Light cassette | 0.73 m long | 0.73 x 1.00 | 5.2 | 15 | 5981.073 ⌚ |
| | | | | 1.09 m long | 1.09 x 1.00 | 7.1 | 15 | 5981.109 ⌚ |
| 1.57 m long | 1.57 x 1.00 | | | 9.5 | 15 | 5984.157 ⌚ | | |
| 2.07 m long | 2.07 x 1.00 | | | 11.5 | 15 | 5984.207 🏠 | | |
| 2.57 m long | 2.57 x 1.00 | | | 14.2 | 15 | 5984.257 🏠 | | |
| 3.07 m long | 3.07 x 1.00 | | | 16.2 | 15 | 5984.307 🏠 | | |
| Light cassette, metric | 0.50 m long | | 0.50 x 1.00 | 4.0 | 15 | 5981.050 ⌚ | | |
| | 1.00 m long | | 1.00 x 1.00 | 6.0 | 15 | 5981.100 ⌚ | | |
| | 1.50 m long | | 1.50 x 1.00 | 8.6 | 15 | 5984.150 ⌚ | | |
| | 2.00 m long | | 2.00 x 1.00 | 10.6 | 15 | 5984.200 ⌚ | | |
| | 2.50 m long | | 2.50 x 1.00 | 13.0 | 15 | 5984.250 ⌚ | | |
| | 3.00 m long | | 3.00 x 1.00 | 15.5 | 15 | 5984.300 ⌚ | | |
| | 3 | | Connection rail | 0.73 m long | 0.73 | 1.7 | 20 | 5983.073 🏠 |
| | | | | 1.09 m long | 1.09 | 1.9 | 30 | 5983.109 🏠 |
| 1.57 m long | | 1.57 | | 2.9 | 30 | 5983.157 🏠 | | |
| 2.07 m long | | 2.07 | | 3.7 | 30 | 5983.207 🏠 | | |
| 2.57 m long | | 2.57 | | 4.6 | 30 | 5983.257 🏠 | | |
| 3.07 m long | | 3.07 | | 5.5 | 30 | 5983.307 🏠 | | |
| Connection rail, metric | | 0.50 m long | 0.50 | 1.2 | 30 | 5983.050 ⌚ | | |
| | | 1.00 m long | 1.00 | 1.9 | 30 | 5983.100 ⌚ | | |
| | | 1.50 m long | 1.50 | 2.6 | 30 | 5983.150 ⌚ | | |
| | | 2.00 m long | 2.00 | 3.6 | 30 | 5983.200 ⌚ | | |
| | | 2.50 m long | 2.50 | 4.5 | 50 | 5983.250 ⌚ | | |
| | | 3.00 m long | 3.00 | 5.4 | 30 | 5983.300 ⌚ | | |
| | | 4 | Corner cassette 90° | 0.16 x 1.00 | 6.2 | 50 | 5985.010 🏠 | |
| | | | Allround inner corner cassette 90°, 1.00 m | 0.39 x 1.00 | 10.2 | 20 | 5985.040 🏠 | |
| 6 | Connection rail 90° | 0.17 x 0.17 | 0.6 | 20 | 5985.011 🏠 | | | |
| | Connection rail 90°, internal | 0.39 x 0.39 | 1.8 | 40 | 5985.041 ⌚ | | | |

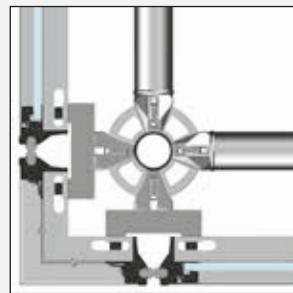
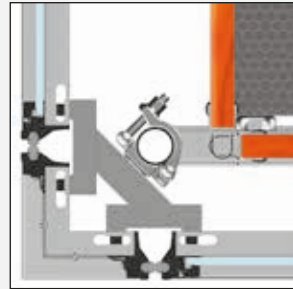
WS = wrench size PU = packaging unit 🏠 = available ex works ⌚ = delivery time on request 🏠 = only available in this packaging unit

System Components

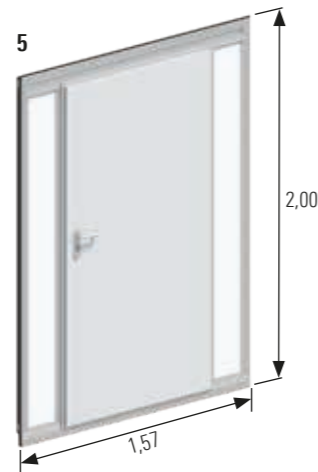
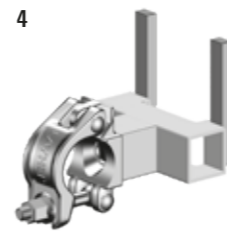
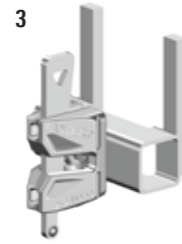
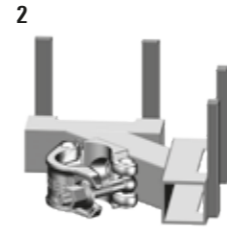
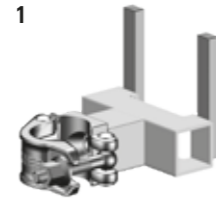
The cassettes are secured to the scaffolding using special **holders 1–4**; which are installed at a standard height of 1.00 m. Once the lower row of cassettes has been installed and aligned, all the other cassettes are mounted and secured simply using holders. The subsequent removal and installation of individual cassettes for material covering or other purposes is possible.

For access to the cladded scaffolding, the **light door elements 5 and 6** are available. Both doors are for axis dimensions 1.57 m and thanks to the gap ledger **7** they are free of tripping hazards.

If required, the **light cassettes** can be equipped with single-glazed safety glass (particularly resistant to mechanical loads).



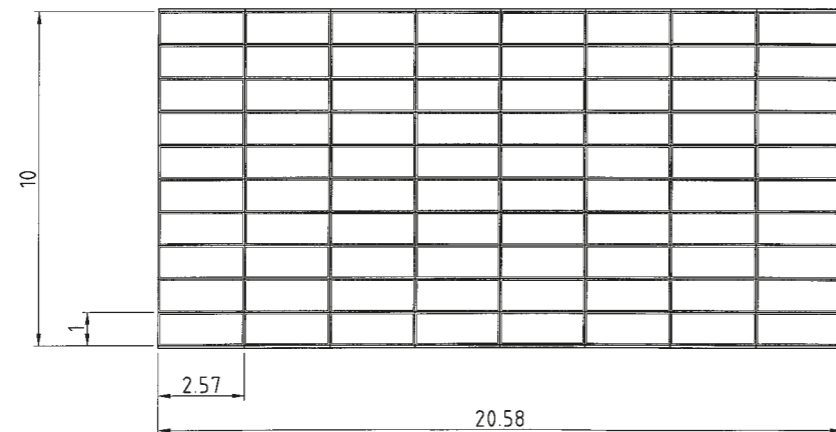
The components of the Protect system are only available ex works. Metric bay lengths are possible with delivery time upon request.



| Pos. | Description | Dimensions L/H x W [m] | Weight approx. [kg] | PU [pcs.] | Ref. No. |
|------|--|------------------------|---------------------|-----------|-------------------|
| 1 | SpeedyScaf holder for wall cassette T9 | WS 19 | 1.6 | 250 | 5986.011 |
| 2 | SpeedyScaf corner holder for wall cassette T9 | WS 19 | 2.4 | 250 | 5986.021 |
| 3 | Allround holder for wall cassette T9 | | 1.2 | 250 | 5986.031 |
| 4 | Ledger holder for half-coupling T9 | WS 19 | 1.6 | 300 | 5986.041 |
| 5 | Light door element for site access Hinged DIN right height clearance 0.94 m width clearance 1.84 m | 1.57 x 2.00 | 45.5 | 1 | 5985.156 |
| 6 | Light door element for escape ways Hinged DIN right with anti-panic handle height clearance 1.19 m width clearance 2.09 m | 1.57 x 3.00 | 68.6 | 1 | 5985.157 |
| 7 | Gap ledger for Protect light door element | 1.57 | 12.7 | 50 | 5985.158 |
| 8 | Real glass cassettes ESG safety glass – without illustration | 0.73 – 3.07 x 1.00 | | | on request |
| 9 | Wall cassettes with enhanced sound insulation in accordance with ZTV-Lsw 88:1988 or DB guidelines 800.2001 (section 2) – without illustration | 0.73 – 3.07 x 1.00 | | | on request |

Material example

This material example is based on a facade scaffolding of Allround Scaffolding:
Width 8 x 2.57 m = 20.56 m, height 10.00 m,
result a face of **205.60 m²**;
at the lower edge of the cassettes, connection rails were fitted.



| Following material is needed | Quantity | Ref. No. |
|------------------------------|----------|-----------------|
| Wall cassette 2.57 x 1.00 m | 80 | 5980.257 |
| Allround holder | 99 | 5986.031 |
| Connection rail 2.57 m | 8 | 5983.257 |

WS = wrench size PU = packaging unit = available ex works = delivery time on request = only available in this packaging unit