CALENBERG

ASSEMBLY INSTRUCTIONS

Cisilent Type L on scaffolding

A LISEGA Group Company

Cisilent Type L on scaffolding

This installation manual describes the assembly and fastening of Cisilent Type L to a scaffolding system. The manual cannot cover all special installation cases. It is the installer's duty to plan the installation carefully and to solve any special cases that are not described responsibly in the interests of stability of the complete system and the attainment of the intended protection goal. Cisilent Type L can be attached to a wide variety of support structures. Therefore, this manual cannot cover all special features of the fastening. Our consultants are at your disposal should you have any questions.

The scaffolding system, as a support structure for Cisilent Type L, is to be erected in accordance with the specifications of the scaffolding manufacturer or a responsible representative. Stability must be proven, taking into consideration the full surface coverage. The support scaffolding must be visually inspected before erection to ensure it is in a serviceable condition and not damaged. The local building site management must be informed without delay of any concerns regarding the suitability of the substructure. Installation should only take place after a decision has been taken by the responsible person on the concerns raised.

There may be a risk of falling when installing and removing Cisilent Type L. The work must be planned and executed in such a way that endangerment of those carrying out the work is avoided or at least minimised. The installer must take suitable measures based on their own risk assessment.

The assembly instructions must be available and familiar to the person responsible for the installation and to the skilled workers carrying out the work. The statutory industrial safety regulations (in Germany: Betriebssicherheitsverordnung [BetrSichV]) must be observed while working on the scaffolding. The prescribed check can be used to verify the proper installation of Cisilent Type L. The result must be documented.

Usage

The covering of the scaffolding area with Cisilent Type L serves to reduce the transmission of airborne sound. The system can also be used as a dust protection wall and sight screen. Cisilent Type L is suitable for use as temporary noise protection walls both outdoors and in closed rooms. The support structure consists of modular scaffolding or structures manufactured by the customer.

Cisilent Type L is fastened to the scaffolding poles using buckle straps. The buckle straps are fastened through the loops in the loop band, which is welded to the top layer. Each buckle strap can bear a load of around 1 kN when secured firmly by hand.

Notes on installation of the scaffolding system

The scaffolding system must be fully erected and ballasted or anchored for the intended height of the covering. The specifications in the scaffolding system approval must be observed. We recommend having Cisilent Type L installed by two qualified persons. It must always be expected that an element can fall down. The person in charge must implement suitable safety measures for installation. Cisilent Type L is tailored to the dimensions of the scaffolding system. If scaffolding sections are mounted at an oblique angle, you must check the tightness of the overlap areas in the longitudinal and transverse direction of Type L carefully. Sound will radiate through any gaps, thus reducing the effectiveness of the desired insulation.

Cisilent Type L

The closed top layers of Cisilent Type L limit the passage of sound and one top layer serves as a load-bearing layer for the loop bands. For the success of the noise reduction measure it is of little importance which side faces the noise source.
Cisilent Type L is fitted at the top with a fastening edge in which eyelets are installed. Below the fastening edge, the loop band is welded to the top layer of Cisilent. Four buckle straps are pre-installed in the upper loop band.
The loop band at the bottom sits about 5 cm above the edge of the Type L and is fitted with three buckle straps, which sit in the intermediate spaces between the buckle straps attached at the top edge. At the side edges, the loop bands are welded on and each is fitted with two buckle straps, which are offset in height to one another (see fig. 1).

Fig. 1: Delivery condition, loop bands, buckle straps

Installation with buckle straps

The installation starts at bottom left, proceeding to top right. The elements can be rolled up for transport in the scaffolding and can be brought by one person from the storage location of the transport container to the installation location. Cisilent Type L is unrolled and coarsely aligned in the scaffolding section. The outer buckle straps are strapped to the upper scaffolding pole with sufficient play. This play facilitates the alignment of Cisilent to the scaffolding poles. The side loop bands are positioned in such a way that the edge of the loop band locks with the scaffolding post's visible rim.

If the element is positioned in the scaffolding section in this way, the upper edge of the Cisilent Type L fits perfectly to the scaffolding pole. The buckle straps can now be tightened firmly by hand. It is not advisable to fasten the buckle straps too tightly, as the force of the wind could damage the pre-stretched loops on the loop band.
The lateral buckle straps are tightened by hand and fix Cisilent Type L so that half of the scaffolding section is covered (see Fig. 4). The above work steps must then be repeated for the installation on the other half.
The joint in the middle of the scaffolding section is secured with the buckle straps by pulling them through the loop bands of the adjacent element.
The lower buckle straps can remain open for the time being if the wind conditions at the installation site allow.
The installation is continued in the lower scaffolding level until the last scaffolding section is covered with Cisilent Type L. The edges of Cisilent overlap and prevent the passage of sound (see Fig. 4).

The installation of Cisilent Type L in the next scaffolding level follows the work steps described above. The eyelets in the fastening edge located at the top serve as transport aids. Ropes with hooks are hung over the upper scaffolding pole and lowered to the ground. The Cisilent Type L to be installed is hooked on with the eyelets and pulled up with the ropes to the preliminary position. Then, as already described, the buckle straps are fastened, the element aligned and the installation completed.

The lower edge of the Cisilent Type L located above now overlaps the upper edge of the Type L in the scaffolding section below (see Fig. 3). The lower buckle straps of the upper Type L enclose the scaffolding pole in the spaces between the upper buckle straps of the lower Type L. The buckle straps are tightened by hand and press the lower edge of the Cisilent Type L against the fastening edge of the lower Cisilent Type L, so that the overlap reduces the passage of sound.

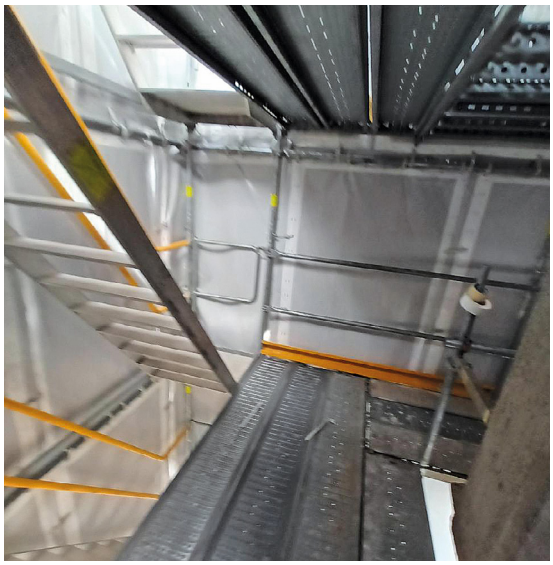
Fig. 2: Start of installation, alignment

Fig. 3: Fastening to the horizontal scaffolding pole, upper overlap

Fig. 4: Fastening to vertical scaffolding pole, connection of Cisilent in middle of section

Fig. 5: Cisilent Type L, external view

Fig. 6: Cisilent Type L, internal view



Ground closure

When installing Cisilent Type L close to the ground, we recommend closing the gap between the bottom horizontal scaffolding pole and the ground with a Cisilent protective strip to limit the passage of sound. If the buckle straps of Cisilent Type L are firmly strapped to the bottom scaffolding pole, we recommend loosening the buckle straps before mounting the protective strip. The protective strip is fastened to the lower scaffolding pole and aligned. Once the buckle straps of the protective strip have been tightened by hand in the final position, the buckle straps of the Cisilent Type L are tightened by hand around the lower scaffolding pole. The lower edge now overlaps the protective strip. Sand or a similar material is heaped up against the protective strip up to the lower edge of Cisilent Type L in order to secure the position and limit the passage of sound.

Inspection and maintenance

No maintenance is necessary during the period of use of Cisilent Type L. Depending on wind loads, the tightness of the buckle straps is to be checked and if necessary corrected. Damaged buckle straps must be replaced. If the loop band is damaged, the buckle strap should be relocated to a place that is visually undamaged.

Removal

To remove Cisilent Type L, follow the work steps described above in the reverse order.

Calenberg Ingenieure GmbH
Am Knübel 2 - 4
31020 Salzhemmendorf | Germany

Phone + 49 51 53 – 94 00-0
Fax + 49 51 53 – 94 00-49

info@calenberg-ingenieure.de
www.calenberg-ingenieure.de

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