

MOMENT LOOP BOX (MLB) INSTALLATION GUIDELINES



Malaysia

Leviat

28, Jln Anggerik Mokara 31/59, Kota
Kemuning, 40460 Shah Alam,
Selangor
Tel.: +603 5122 4182
E-Mail: info.my@leviat.com

Singapore

Leviat

14 Benoi Crescent
Singapore
629977
Tel.: +65 6266 6802
E-Mail: info.sg@leviat.com

India

Leviat

309, 3rd Floor, Orion Business Park,
Ghodbunder Road, Kapurbawdi, Thane
West, Thane, Maharashtra 400607
Tel.: +91 022 2589 2032
E-Mail: info.in@leviat.com

Philippines

Leviat

U-2933 Regus, Joy Nostalg Centre,
#17 ADB Avenue, Ortigas Center,
Pasig City 1605
Tel.: +63 2 7957 6381
E-Mail: info.ph@leviat.com

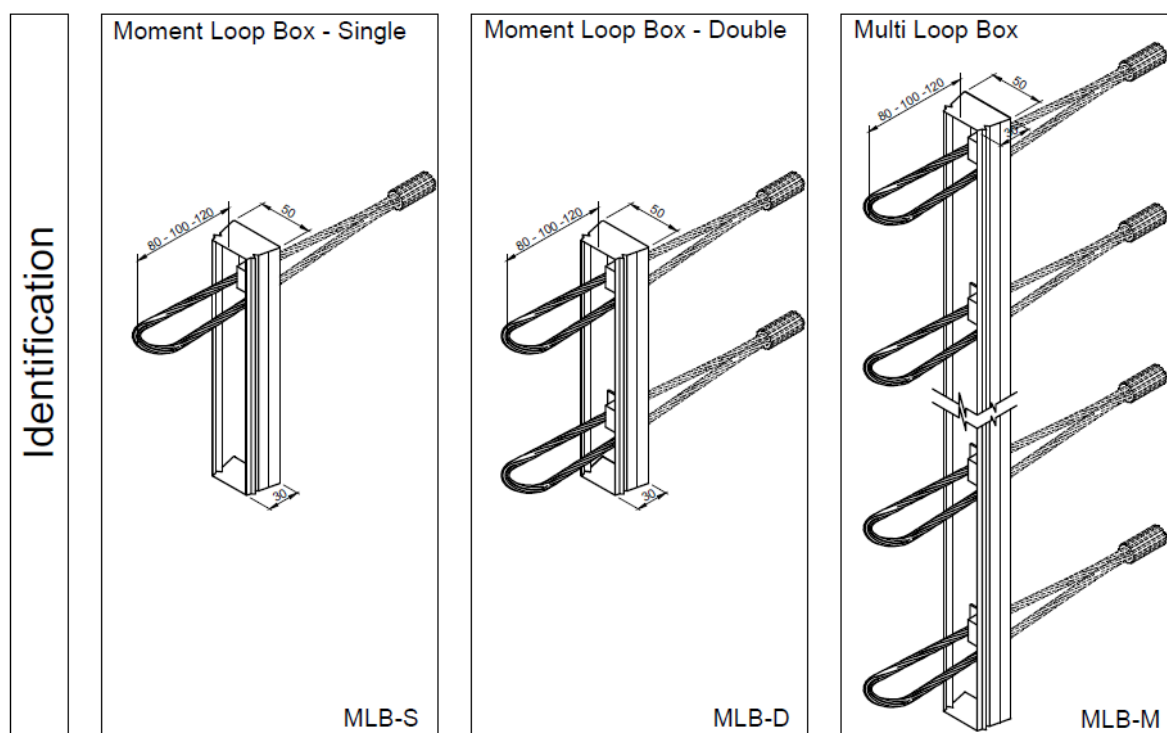


Figure 1: Moment Loop Box (MLB) Identification.

There are 4 ways to install the Moment Loop Box (MLB):

1. Nail
2. Hot Glue
3. Gi Wire
4. Magnets

Malaysia
Leviat
28, Jln Anggerik Mokara 31/59, Kota
Kemuning, 40460 Shah Alam,
Selangor
Tel.: +603 5122 4182
E-Mail: info.my@leviat.com

Singapore
Leviat
14 Benoi Crescent
Singapore
629977
Tel.: +65 6266 6802
E-Mail: info.sg@leviat.com

India
Leviat
309, 3rd Floor, Orion Business Park,
Ghodbunder Road, Kapurbawdi, Thane
West, Thane, Maharashtra 400607
Tel.: +91 022 2589 2032
E-Mail: info.in@leviat.com

Philippines
Leviat
U-2933 Regus, Joy Nostalg Centre,
#17 ADB Avenue, Ortigas Center,
Pasig City 1605
Tel.: +63 2 7957 6381
E-Mail: info.ph@leviat.com

1. Nail or Hot Glue

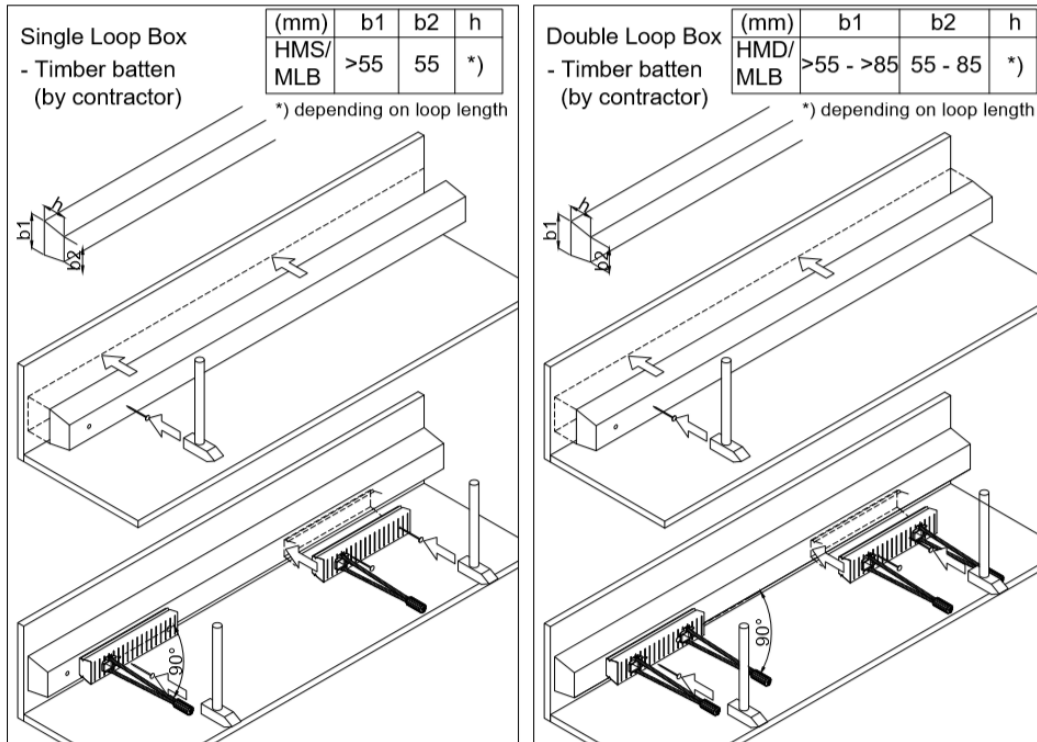
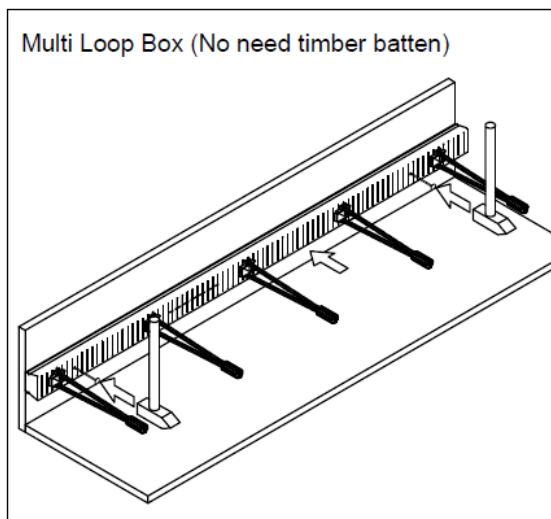


Figure 1: Installation Using Nail or Glue for MLB-S and MLB-D



Fixing to timber formwork:

- nailing (at least 2 nails per MLB)
- glueing (adhesive tape, hot glue)

Fixing to steel formwork:

- glueing (adhesive tape, hot glue)

Figure 2: Installation Using Nail or Glue for MLB-M

Malaysia

Leviat
28, Jln Anggerik Mokara 31/59, Kota
Kemuning, 40460 Shah Alam,
Selangor
Tel.: +603 5122 4182
E-Mail: info.my@leviat.com

Singapore

Leviat
14 Benoi Crescent
Singapore
629977
Tel.: +65 6266 6802
E-Mail: info.sg@leviat.com

India

Leviat
309, 3rd Floor, Orion Business Park,
Ghodbunder Road, Kapurbawdi, Thane
West, Thane, Maharashtra 400607
Tel.: +91 022 2589 2032
E-Mail: info.in@leviat.com

Philippines

Leviat
U-2933 Regus, Joy Nostalg Centre,
#17 ADB Avenue, Ortigas Center,
Pasig City 1605
Tel.: +63 2 7957 6381
E-Mail: info.ph@leviat.com

2. GI Wire

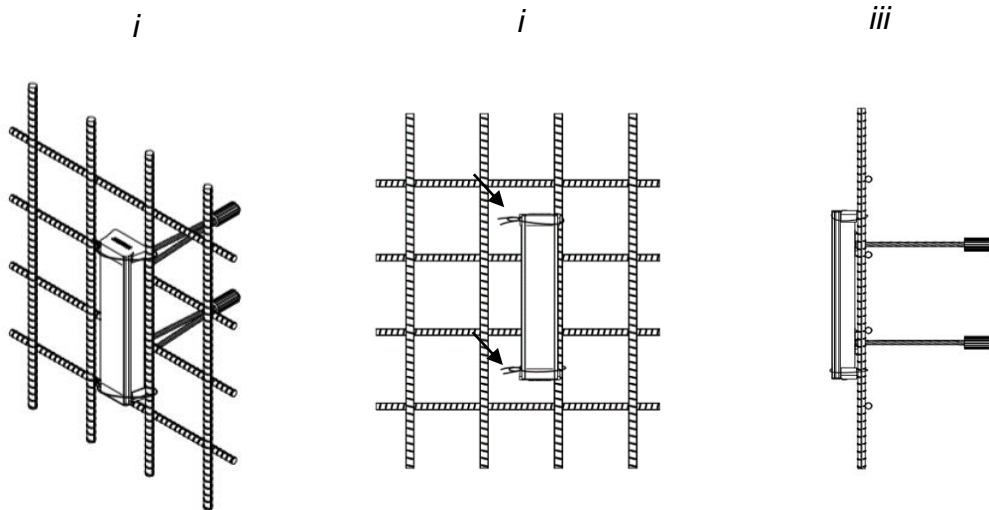


Figure 4: Installation Using GI Wire

- Secure MLB to reinforcement bar, using GI wire at top and bottom locations as shown in Figure 4. The GI wire should be pressing against the black caps at the MLB edges.
- The GI wire knot should be on the side face of the MLB, refer Figure 4 (ii).
- Ensure MLB is not misaligned, refer Figure 5.

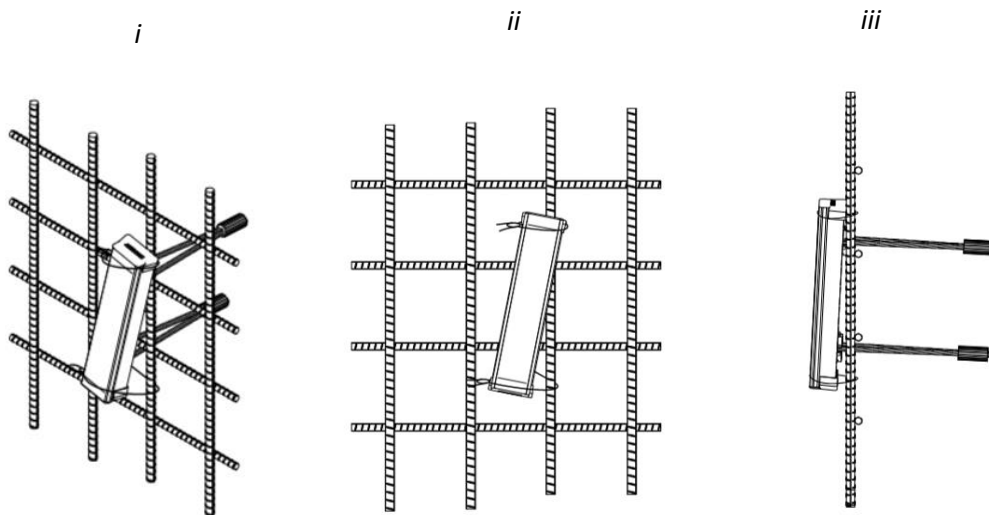


Figure 5: Installation Using GI Wire (Misaligned).

Malaysia
Leviat
28, Jln Anggerik Mokara 31/59, Kota
Kemuning, 40460 Shah Alam,
Selangor
Tel.: +603 5122 4182
E-Mail: info.my@leviat.com

Singapore
Leviat
14 Benoi Crescent
Singapore
629977
Tel.: +65 6266 6802
E-Mail: info.sg@leviat.com

India
Leviat
309, 3rd Floor, Orion Business Park,
Ghodbunder Road, Kapurbawdi, Thane
West, Thane, Maharashtra 400607
Tel.: +91 022 2589 2032
E-Mail: info.in@leviat.com

Philippines
Leviat
U-2933 Regus, Joy Nostalg Centre,
#17 ADB Avenue, Ortigas Center,
Pasig City 1605
Tel.: +63 2 7957 6381
E-Mail: info.ph@leviat.com

- d. Ensure sufficient gap between reinforcement and formwork. The MLB thickness is 30mm. Do not have gap less than that or it could crush the MLB.
- e. If using MLB-M note that additional GI wire may be necessary to secure the MLB-M along its length. In this case, do not over tighten GI wire until the MLB-M starts to permanently deform. This will also make it challenging to pull out the loops on site.
- f. Deflection of 1-2 mm of the side face is acceptable for securing with GI wire. Verify MLB-M has been secured well, by manually trying to move the box using light pressure.

3. Magnets

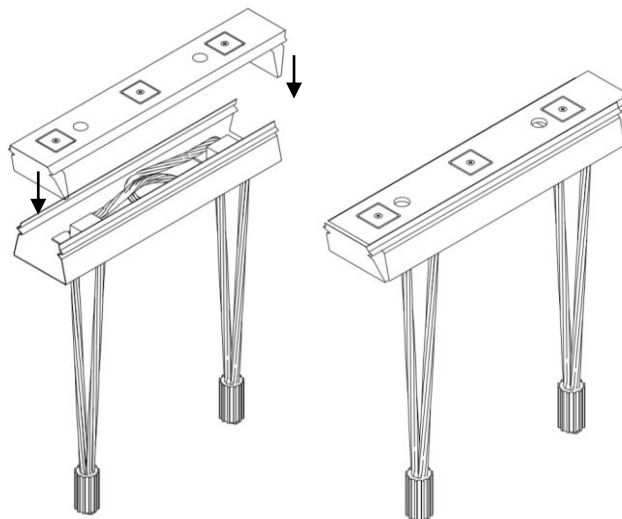


Figure 3: Attaching Reusable Back Cover onto Moment Loop Box S or D.

- a. The magnets are secured into Moment bespoke reusable back cover using screws. Do not attempt to remove the magnets without consulting Moment technical team beforehand.
- b. The magnetic back cover can be easily attached to the MLB, refer Figure 6.
- c. Do apply some mould release or oil on the rubber edge surfaces (Figure 6, where the arrow is protruding out from), prior to use.
- d. For MLB-M, there could be more than two pieces of reusable back cover being used. In this case, duct tape (or cloth tape) should be used to cover the gap in between. See Figure 7.

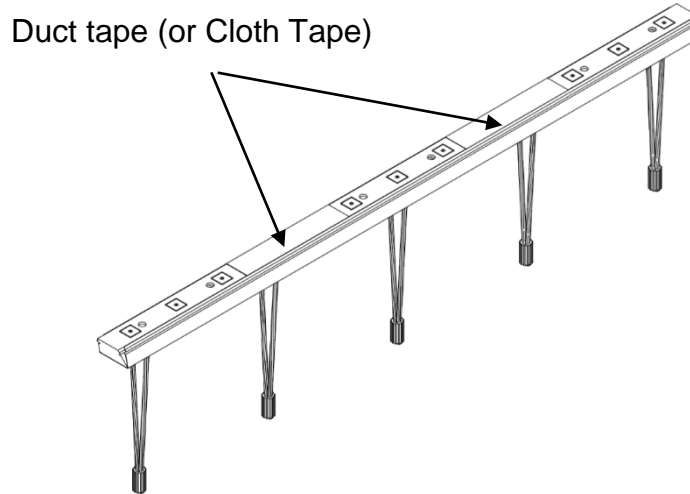
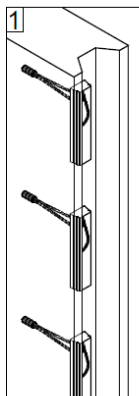
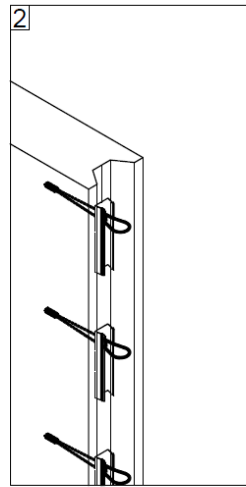


Figure 4: Multi Loop Box with Reusable Back Cover.

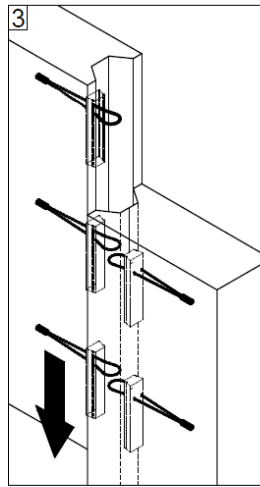
On the construction site



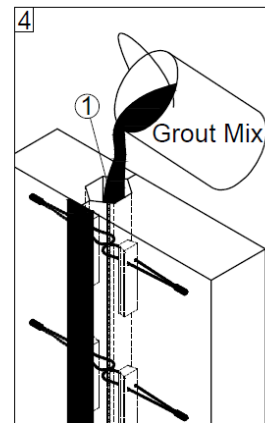
1. Precast concrete element with closed MLB - Single/Double



2. Remove the MLB cover (Tape) from the concrete.



3. Setting up the precast element. All wire loops must protrude perpendicularly to the joint, and after deflection during the setting up they should springback into this position.



4. Insert the reinforcement bar diam. 12mm and encase the joint with an appropriate formwork. Prepare the Grout Mix according to the manufacturers instructions. The maximum grouting height is 3.5m, or use a hose. Grout mix is free flowing, no additional compaction is required

Malaysia
Leviat
28, Jln Anggerik Mokara 31/59, Kota
Kemuning, 40460 Shah Alam,
Selangor
Tel.: +603 5122 4182
E-Mail: info.my@leviat.com

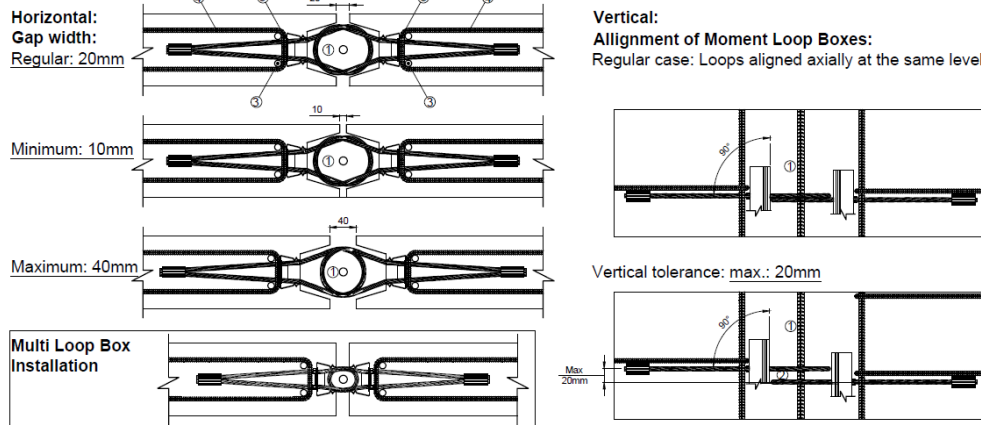
Singapore
Leviat
14 Benoi Crescent
Singapore
629977
Tel.: +65 6266 6802
E-Mail: info.sg@leviat.com

India
Leviat
309, 3rd Floor, Orion Business Park,
Ghodbunder Road, Kapurbawdi, Thane
West, Thane, Maharashtra 400607
Tel.: +91 022 2589 2032
E-Mail: info.in@leviat.com

Philippines
Leviat
U-2933 Regus, Joy Nostalg Centre,
#17 ADB Avenue, Ortigas Center,
Pasig City 1605
Tel.: +63 2 7957 6381
E-Mail: info.ph@leviat.com

Adjustment, installation of additional reinforcement

Installation tolerance according to official approvals, recommended also for application as constructive connections



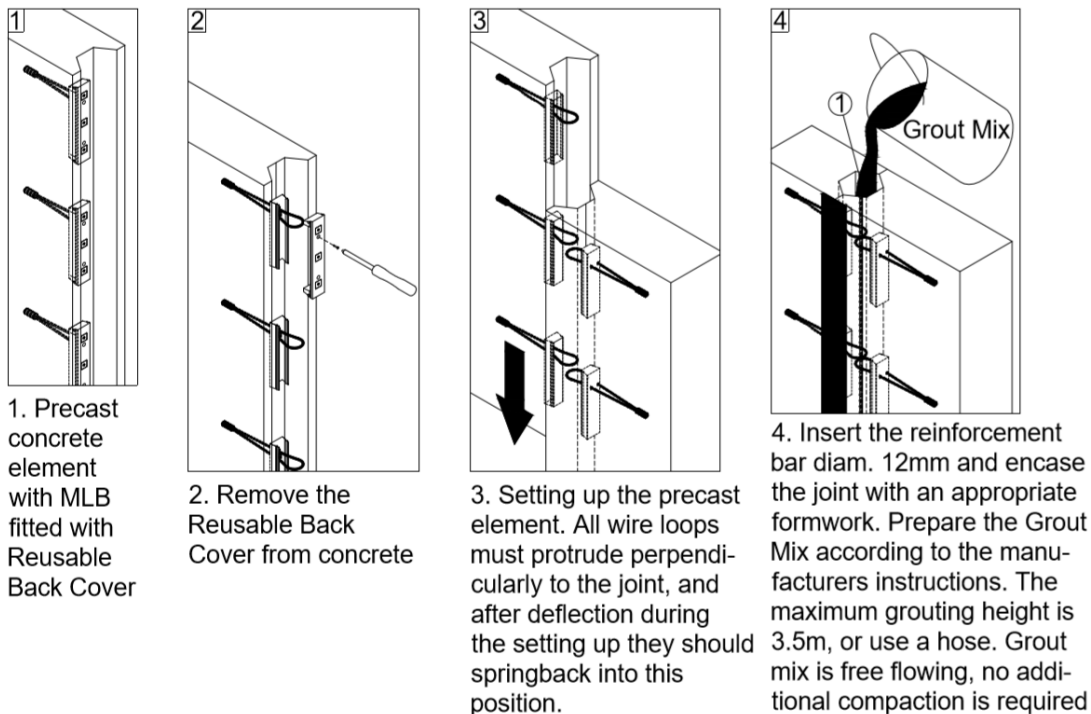
Installation of additional reinforcement:

Additional reinforcement must be installed following the reinforcement drawing and attached the structural reinforcement

- ① Bar B500A, diam. 12mm
- ② A vertical tolerance of 20mm maximum is permitted. Wire binding of loops is not compulsory.
- ③ Bar B500A, diam. 10mm
- ④ Stirrup B500A, diam. 8mm, anchoring acc. DIN 1045-1

Welding on MLB-S/D/M is not permitted!

With Reusable Back Cover (ideally the cover should be removed at precaster's yard)



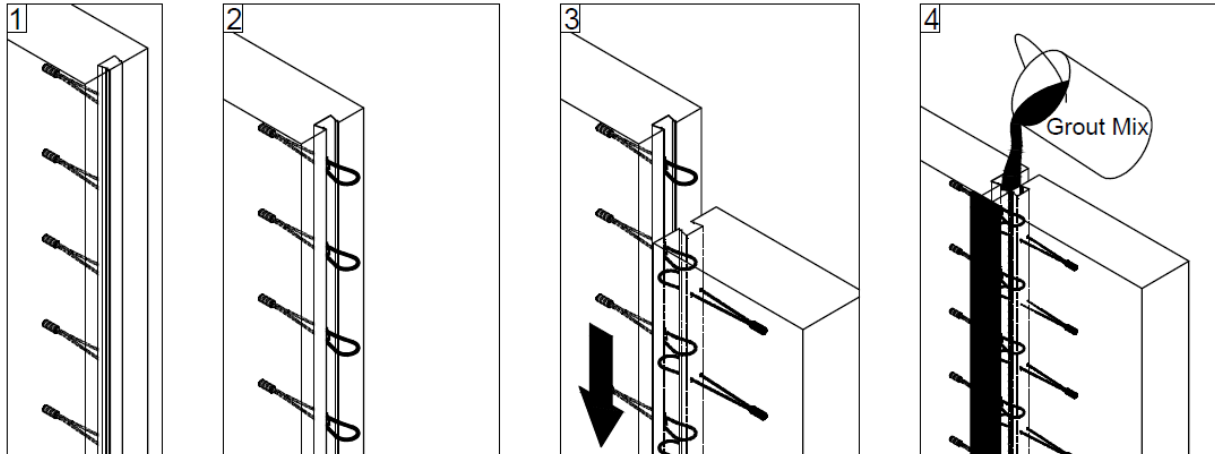
Malaysia
Leviat
28, Jln Anggerik Mokara 31/59, Kota
Kemuning, 40460 Shah Alam,
Selangor
Tel.: +603 5122 4182
E-Mail: info.my@leviat.com

Singapore
Leviat
14 Benoi Crescent
Singapore
629977
Tel.: +65 6266 6802
E-Mail: info.sg@leviat.com

India
Leviat
309, 3rd Floor, Orion Business Park,
Ghodbunder Road, Kapurbawdi, Thane
West, Thane, Maharashtra 400607
Tel.: +91 022 2589 2032
E-Mail: info.in@leviat.com

Philippines
Leviat
U-2933 Regus, Joy Nostalg Centre,
#17 ADB Avenue, Ortigas Center,
Pasig City 1605
Tel.: +63 2 7957 6381
E-Mail: info.ph@leviat.com

Multi Loop Box



1. Precast concrete element with closed Multi Loop Box

*Follow above instruction for all step of installation

For Multi Loop Box, the end caps need to be broken on site, to ensure grout can flow freely all the way to the bottom.

Disclaimer:

Any technical advice/support or drawings provided by us in whatever form is given to the best of our knowledge and for general use only and shall be considered non-binding information.

Malaysia
Leviat
28, Jln Anggerik Mokara 31/59, Kota Kemuning, 40460 Shah Alam, Selangor
Tel.: +603 5122 4182
E-Mail: info.my@leviat.com

Singapore
Leviat
14 Benoi Crescent
Singapore
629977
Tel.: +65 6266 6802
E-Mail: info.sg@leviat.com

India
Leviat
309, 3rd Floor, Orion Business Park, Ghodbunder Road, Kapurbawdi, Thane West, Thane, Maharashtra 400607
Tel.: +91 022 2589 2032
E-Mail: info.in@leviat.com

Philippines
Leviat
U-2933 Regus, Joy Nostalg Centre, #17 ADB Avenue, Ortigas Center, Pasig City 1605
Tel.: +63 2 7957 6381
E-Mail: info.ph@leviat.com