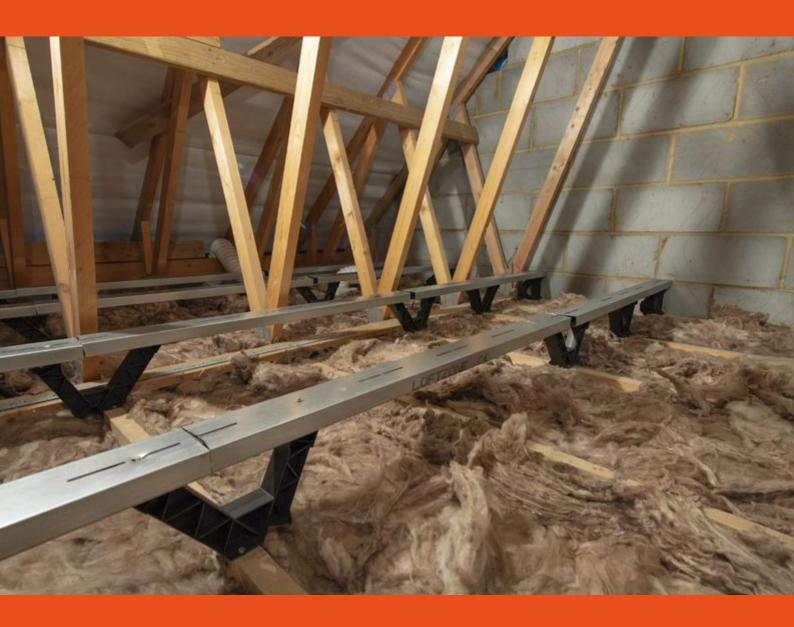
# LOFIZONE STOREFLOOR COMPACT



**INSTALLATION INSTRUCTIONS** 

## **Attention**

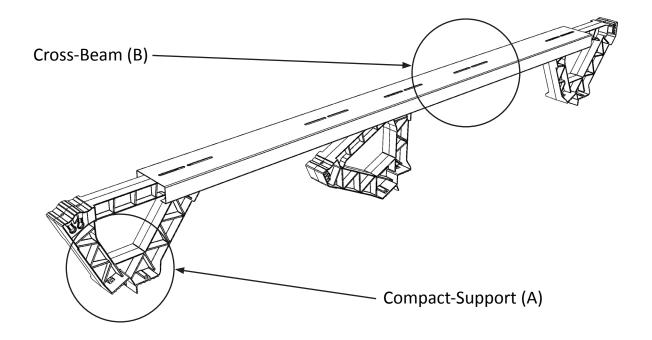
- Whilst working in an attic space with insulation we recommend wearing personal protective equipment. Insulation can cause skin irritation and inhalation should also be avoided.
- Take care when using a ladder to access an attic space and place walk boards where access is required to install the deck.
- Ensure you do not step on the plasterboard ceiling as there is a risk of falling through.
- Attic spaces are confined and can have restricted headroom. Temperatures in attics can be very high in summer and very cold in winter.
- Avoid contact with, or damaging, electric cables and pipework. If you choose the configuration correctly, you can span over such obstructions.
- StoreFloor Compact should be used for the storage of light items due to the loading limit of the existing roof structure. Maximum weight loading on the StoreFloor is 25kg/m² or 5 pounds per square foot, unless you are sure your loft joists can bear greater loads. If in doubt about the strength of your joists, please consult a structural engineer about the loading limit of your existing roof structure.
- StoreFloor Compact is not a replacement for a permanent fixed floor and is designed for occasional access only.
- Take care whilst working in an attic to ensure the plasterboard ceiling below does not crack.

## Before you begin

- Only install this product in a well-ventilated attic that is free from condensation.
- Ensure safe access to your attic and provide adequate lighting, taking care of trailing cables.
- Clear the area where StoreFloor Compact will be located and load all materials into the attic, making sure they cannot slide back as you lift them up.
- Install insulation between the joists, up to the top of the joist, if this has not already been done. Temporarily make space for the plastic Compact-Supports to be placed on to the joists.

NOTE: If you have downlighters in the floor of your attic, then provide adequate protection to these, by fitting a downlight insulation box over each light.

## Parts Required



You will need 2 screws per Cross-Beam and 2 per Compact-Support. We recommend  $4 \times 40$ mm (or  $8 \times 1.5$ ") wood screws. You can also use the same size screws to fix the flooring boards on to the Cross-Beams.

## **Tools Required**

#### **Essential**

- Gloves
- Appropriate footwear
- Tape measure
- Electric drill with screwdriver attachment

#### Recommended

- Mask
- Eye protection
- Spare battery for electric cordless drill

## Step 1

- Plan the configuration of your StoreFloor Compact where you would like it to be in your attic.
- Approximately set out where all the supports will be located ensuring they avoid obstructions in the attic, such as cables and pipes.



## Step 2

- Screw in the first plastic Compact-Supports

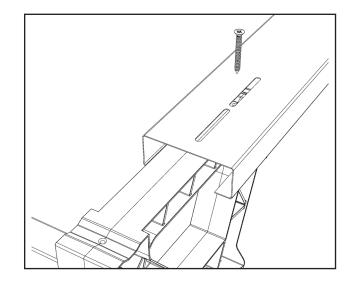
   (A) to the joist.
- Ensure they are placed precisely 610mm apart, as measured from the middle of one Compact-Support to the middle of the next one, if you are using the 1220mm boards that are common in the UK. If you are using 4 ft boards (e.g. in North America) then please place the Compact-Supports 24" apart, this again being the measurement between the middle of each support.
- Each Compact-Support should be fixed with two screws into the joist it sits on.
- If your joists are 600mm (24") apart, then there will be one joist between each row of Compact-Supports. If your joists are 400mm (16") apart, then there will be two joists.



## Step 3

- Slide the Cross-Beams (B) on to the Compact-Supports (A). It is not necessary for the Cross-Beams to slide right up to the middle of the Compact-Support.
- Once (A) & (B) are in position screw down firmly anywhere through the slit on the Cross-Beam into the pre-drilled hole in the top of the Compact-Support.

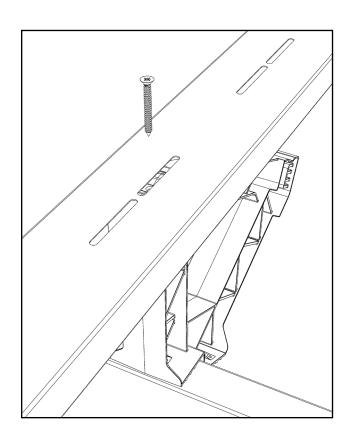
NOTE: It is normal for the Cross-Beams to be compressed down slightly into the support.



# Step 4

- Install your remaining Compact-Supports underneath the mid-points of your Cross-Beams, to stiffen them up, either evenly across the floor, or in areas of highest footfall and loading.
- In this case, rotate the Compact-Support so that it rests on its other base and you are using it as a vertical leg, as shown. Screw the support into the joist through any one of the two pre-drilled holes in its base, and then use another screw through the slit in the top of the Cross-Beam and into the hole in the support below.
- You can also use the Compact-Support in this orientation at the end of a Cross-Beam if you are near a wall or hatch and tight for space.
- See the FAQs page in this guide for more information on using the Compact-Support like this.

NOTE: Two holes are provided in the base of the Compact-Support but you only need to use one screw into the joist when it's being used as a vertical leg; we've provided two holes to make it easier to access from either side. This screw into the joist can be inserted vertically or at an angle.



## Step 5

- Now fit the full depth of insulation into position between the rows of Cross-Beams, making sure you don't leave gaps around the supports.
- Screw the flooring boards directly into the metal Cross-Beams, allowing for the tongueand-groove fitting of many boards. Do not try to fix the screws into the slits in the top of the Cross-Beams, but self-tap them into the metal directly. You may find it useful to use the hammer setting on your drill for this.
- The flooring boards should reach half-way across the 80mm (3") width of the Cross-Beam; this is to allow a second board to be positioned up against it and for both boards to be supported by the same Cross-Beam, as shown in the photo. At the ends of your deck, if you wish, you may prefer to let the board sit across the full width of the Cross-Beam. There is no need to stagger boards; the deck is strong enough without doing this.



# Step 6 (optional)

You can choose to make good the area around the access hatch, with boards that are fixed vertically, as shown in this photo, or with fabric sheeting. However make sure you don't significantly block the airflow from eave-to-eave under the boards or sheeting materials.



## General tips and hints:

Ensure that there is an air gap between the bottom of the Cross-Beams and the top of the insulation; this is to allow air to flow from eave-to-eave across the top of the insulation and remove any moisture before it has a chance to condense on the underside of the boards.

- The area you choose for your StoreFloor Compact doesn't need to be square or rectangular: some people prefer an 'L' or 'T' shape, or choose to have two StoreFloor Compact areas, separated by a gap.
- It is not necessary to clear all your belongings from the attic before starting work.
   StoreFloor Compact is built up in stages and so you can clear a small area, build the deck there, then place your belongings on to the new deck, before moving on to the next area.
- Height is reduced at the edges of your attic (the eaves), so you may not want to board all the way up to the very edge. You should also leave gaps for ventilation at the eaves.
- If you need to access anything fixed in the attic (e.g. a water tank, gas boiler or solar inverter), create a continuous path all the way from the attic hatch to the destination.
- StoreFloor Compact is designed to protect up to 100mm (4") of insulation above your
  joists, plus the insulation between your joists, and can be fitted before or after the
  insulation. If there is no insulation, we advise fitting the first layer of insulation, up to
  joist height, followed by the StoreFloor Compact supports and beams, followed by
  the rest of the insulation. If the full insulation is already present, then you will need
  to temporarily move it to one side in the places where you want to fit the StoreFloor
  Compact supports.
- If you change your mind, and want to add more raised flooring later on, it's easy to do. Extra parts are available to purchase individually.

## Frequently asked questions

#### What size screws should I use?

We recommend 4 x 40mm (8 x 1.5") wood screws. These can be screwed through the pilot holes provided in the supports, and also used to self tap through the boards into the metal of the Cross-Beams.

#### Why can the Compact-Support be fitted in two orientations?

Most of the Compact-Supports should be fitted as inverted triangles to support the ends of the Cross-Beams. The Cross-Beams can slide over the flat part of the triangle, meaning that any small irregularities in your joist spacing can be adjusted for. This design also allows you to span over intermediate joists, so you can miss out any that carry cables or pipes. However a natural consequence of only supporting the Cross-Beams at their ends is that, depending on the loading that you put on your raised deck, the Cross-Beams may flex slightly in the middle. You can therefore use the Compact-Supports to support the middle of the Cross-Beams. You can do this in the inverted triangle position too, of course, but if you rotate the Compact-Support so that rests on its other base and acts as a vertical leg, then you need fewer screws. In our standard kits, we supply one extra Compact-Support to use like this under every second Cross-Beam. You can space them out evenly or concentrate them in areas of highest footfall or loading.

You can also use the Compact-Support in this orientation at the end of a Cross-Beam if you are near a wall or hatch and tight for space.

#### What size joists will work?

The LoftZone system is designed to work with joists that are at least 32mm (1.25") wide, and at least 50mm (2") tall. Most attic joists are spaced at intervals of 400mm (16") or 600mm (24") and our Cross-Beams span these perfectly. However some houses have other, or uneven, joist spacing, and in these cases it may be necessary to cut the Cross-Beams to span the joists correctly, and to purchase additional supports. We recommend using tin snips or a saw to cut the Cross-Beams. They are very strong thanks to their design, but actually only 0.7mm (3/100") thick.

#### What load can I put on the deck?

The LoftZone products have been independently tested to withstand loads of several hundred kilograms (over 1,000 lbs). However your attic joists are likely to be less strong than that, so we advise that you do not put more than 25kg/m2 or 5 pounds per square foot continuously on any area of your deck, plus the weight of one person occasionally

accessing the attic. Of course, many houses can exceed this, but we would recommend you consult a structural engineer before exceeding these recommended limits.

#### Some of my joists are uneven

A design feature of StoreFloor Compact is that it spans over many joists. This makes it faster to install and also means that you can choose the layout to bridge over any uneven joists, where practical.

#### I'd like to create a non-standard sized-deck

It is possible to vary the size of a standard deck slightly, to achieve an exact fit, as follows:

- If you want to move the rows of beams closer together, you can simply do so by screwing the plastic Compact-Supports into the joists a little bit closer together.
- If you want to reduce the length of the Cross-Beams, it is possible to cut them, as described on the previous page. Remember to still support them at each end.

# I am boarding the whole attic space and the last Cross-Beam of each run does not have enough space to slide on

Most people don't board right up to the edge, as they leave a gap for air flow around the edges. However if you do wish to do so then you can loosely slide the final sets of supports under the Cross-Beam, then position the Cross-Beam in place, before screwing everything together when all the items are in place.

# What do I do if a row of Cross-Beams only just fits in my attic space and I don't have space to put a Compact-Support at the end?

In this case, we'd recommend putting a Uni-Support at the end of the row of beams. But make sure that you put the Compact-Support on the next-nearest joist.

#### I've decided I'd like to have someone else install this for me

Sure, that is no problem, contact us or check the LoftZone website and we'll let you know the details of your nearest installer.

### How do I include a attic ladder?

You have several options:

(1) You can use a concertina-style attic ladder which stows inside the hatch.



(2) You can fix a ladder on to a board at the top of the deck. In this case, we would strongly recommend that you support the hinge location with a Cross-Beam.



(3) You can fix a ladder on to a joist and stow it away from the deck.

