

Installation Instructions Parquet Herringbone



Floating and Glue Down installation of Parquet Herringbone with mechanical joint

Carefully read through all the instructions before installing the floor.

Before commencing with installation of the Bjelin floor, familiarise yourself with the appropriate Building Code requirements, including the current performance requirements of Clause E3 (Internal Moisture). Bjelin Engineered Timber complies with E3 as an alternative solution.

Disclaimer: Failure to adhere to these installation instructions may void the warranty, especially if such failure leads to product damage or performance issues. Please refer to the official warranty document for detailed terms and conditions.

Pre-installation

The room and the boards must have a temperature of at least 18° C. Ensure that you evenly distribute the packs so that they can acclimatise to the room temperature.

Take care to inspect each strip before installation. If you are using a professional, make sure that they also read the installation instructions carefully before they begin. Bjelin bears no liability for obvious faults or defects that were visible before installation. Bjelin Parquet Herringbone is normally laid floating, i.e. joined together without being attached to the subfloor. However, it can also be glued down – see instructions on page 7. If using glue down, we recommend using a professional.

Open 2–3 boxes to check for any colour/design variations, and ideally mix boards from different packs. This will give you an idea of the variations before you start installing.

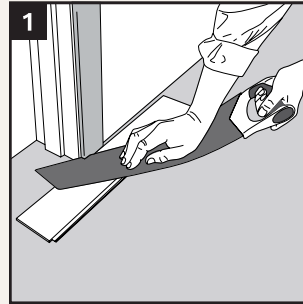
Parquet is laid floating, i.e. joined together without being attached to the subfloor.

- The subfloor should be dry, flat, firm and clean.
 - Remove all carpets.
 - If installing on cellular plastic (EPS), first lay a load-distributing tongue/groove board of at least 6 mm thickness.
 - Our flooring can be laid on underfloor heating and the heating system must provide an efficient and even heat distribution over the entire floor. Surface temperature of the floor must never exceed 27° C (also applies where there are radiator pipes, under rugs and so on).
 - Measure the subfloor's evenness at 2 m and 250 mm. If the difference is greater than ± 3 mm over 2 m or ± 1.2 mm over 250 mm, the subfloor will first need levelling. Note that ± 2 mm over 1 m is approved for installation.
 - The room's relative air humidity (RH) must not exceed 60%. If the RH is below 30%, there is a higher risk of concavity and gaps between boards.
- In low RH, an air humidifier can be used to raise the humidity.
- Wood floors should in most cases be protected against moisture from the subfloor. For best results, we recommend Belgotex Aqua Elite, which is a combined vapour barrier and foam. You can also use a 200 micron age-resistant polyethylene film, applied with a 300 mm overlap in combination with Belgotex Aqua Performance or Aqua Elite underlay. Minimum requirements are CS 40kPa and SD 75 m or greater. Please note that damp proofing is mandatory on subfloors of newly cast concrete, lightweight concrete, concrete floor directly on the ground, crawl space foundations, on joists over hot or humid rooms (e.g. boiler room or laundry room) or underfloor heating systems.
 - The subfloor must be well cleaned and dry to avoid mould. In most cases, this will mean vacuuming the subfloor. Note: Never assume subfloors are dry. If moisture testing is not performed, concrete subfloor should be assumed to have an RH above 75% and a moisture barrier should be installed.
 - The floor moves with varying humidity and should therefore usually have a minimum expansion gap of 10 mm (applies to rooms up to 6 metres wide) against walls and fixed objects (stairs, columns, door frames etc.) for ease of installation. It is also possible to calculate the size you need: include a 1.5mm expansion gap per metre of floor width. This expansion gap must be around the entire floor against the wall and other solid objects. Bear in mind that if just 10 mm of your newly laid floor is touching another surface, such as a wall, it will no longer be able to expand. Rooms up to 13 m wide and 13 m long can be laid as one continuous raft. If the floor is larger, you should divide it. Floors should be divided in doorways with an expansion gap. Cover the expansion gap with moulding trim. When installing in L-, T- or U-shaped rooms and at transitions to corridors, an expansion gap must be left.
 - A skirting board or T-moulding needs to be 50% thicker than the width of the expansion gap. Example: If you have worked out that you need an 8 mm expansion gap between the floor and the wall, the skirting should be at least 12 mm thick.

Instructions

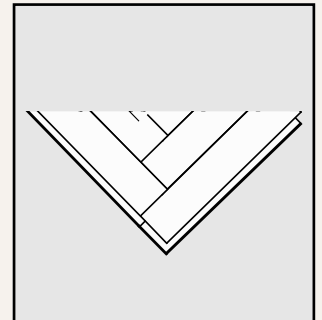
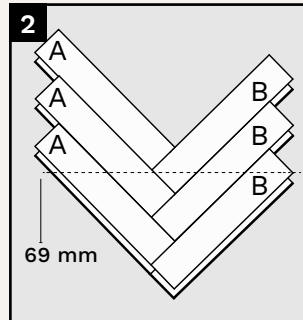
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Start by removing/trimming door frames/architraves so that the floor can be pushed underneath, which gives a neat and professional result. The easiest way is to use a multi-tool or a hand saw. Use a board turned upside down. Remember to leave adequate expansion gaps under door frames and architraves to allow for unrestricted movement.



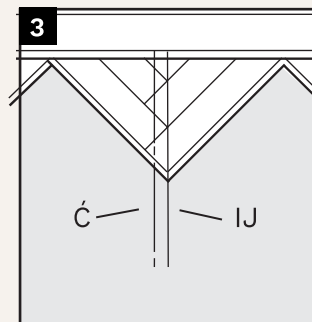
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Determine the herringbone layout before starting the installation. To make installation easier, begin by making starter triangles. First figure out how many triangles you need, and make them from 3 x A strips and 3 x B strips. Measure 69 mm from the corner of the A strip and draw a straight line to the corner of the B strip as pictured. Cut along the line to ensure the right angle. You need about 2.05 triangles per metre, as they are 488 mm after cutting.



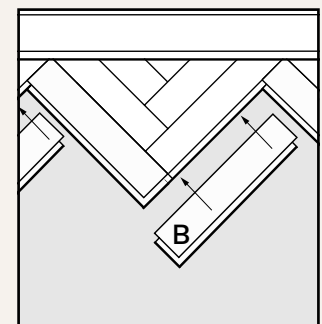
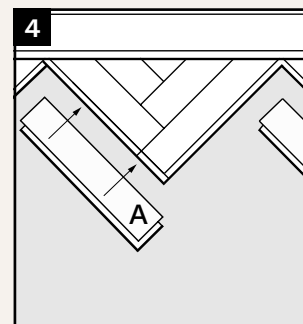
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Measure the room width and mark out the room's centre line (C) on the underlay. Then draw an installation line (I) on the underlay 24 mm to the right of the centre line. This will centre the herringbone pattern in the room.



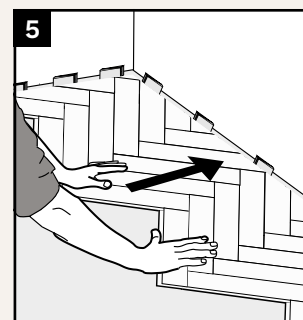
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Once the lines are marked, you can start putting the starter triangles in place. Begin by placing a starter triangle with the point towards the installation line. Install the flooring by placing the strips long side to long side at an angle, and clicking together the short side, A strip and B strip in turn. First install a row of A strips from left to right, then a new row of B strips from left to right, and so on.



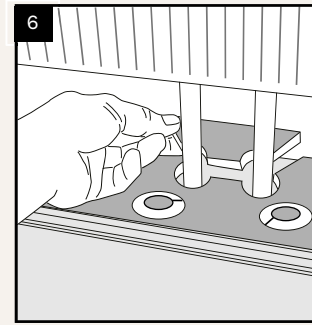
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Install 3 rows and make sure you have the correct distance from the wall. Ideally, use spacers for this. If the floor needs to be adjusted to an uneven wall, do this first before making your final adjustments with wedges.



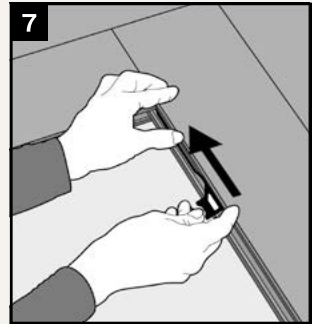
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Around pipes, drill holes at least 20 mm larger than the pipe diameter. Saw as shown, and glue the loose piece back in place after laying the floor. Remove any excess glue immediately. Cover the holes with pipe collars.



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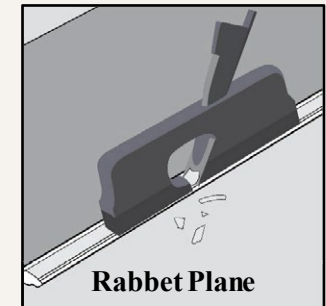
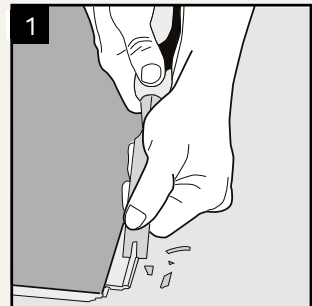
Use Bjelin's dismantling pin for herringbone flooring if you need to remove an installed strip. Push the dismantling pin into the short-side joint to release the locking mechanism.



Reverse Installation

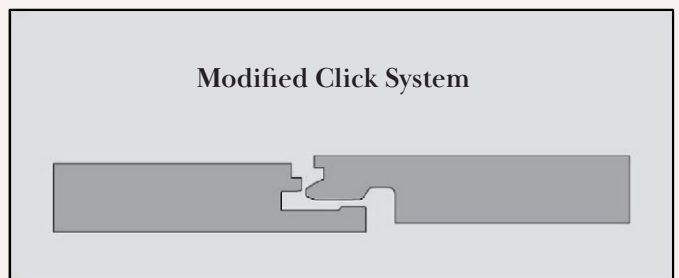
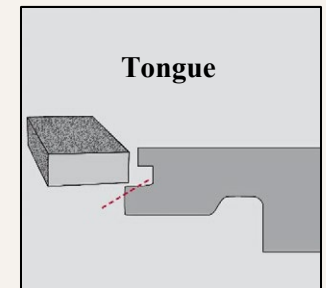
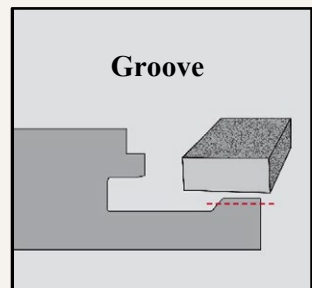
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For reverse installation or when installing under a door frame, for example, you will need to remove the locking strip and glue the joint instead using cross-linking (exterior) PVA wood glue.



Advanced version

1. Using a rabet plane or a wood block with course grit sand paper attached with double sided tape to re-profile along the length of the tongue with an approximate 30–45° angle.
2. Reduce the height of the tensioner by approximately half, along the entire length of it.
3. This will retain the locking system enabling the boards must be applied to ensure joint strength.



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Finally, remove the wedges, and cover the gap between the wall and flooring with skirting board or trim. Flooring trims or transition reducers are used to join wood floors and other flooring materials. Install trims so that the floor can move with seasonal variations.

Floor cover

The basic rule is that the wood floor should be laid last in a construction project in order to avoid damage. If further work is to be done in the room where the floor has been laid, the floor must be protected with a material that allows moisture to pass through (e.g. builder's paper). Also check that the cover does not discolour the floor or leave residues such as wax. Do not tape against the wood floor but only against each sheet of protective covering. Many tapes stick so strongly to the floor surface that the coating comes off

when the tape is removed. The longer the tape is left in place, the higher the risk that it will stick more strongly to the finish.

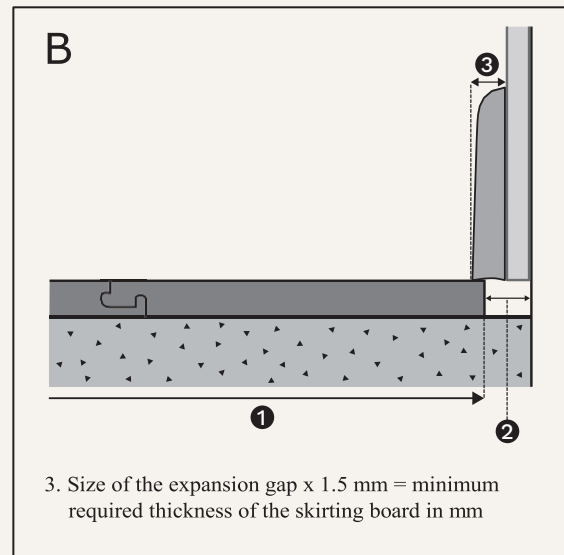
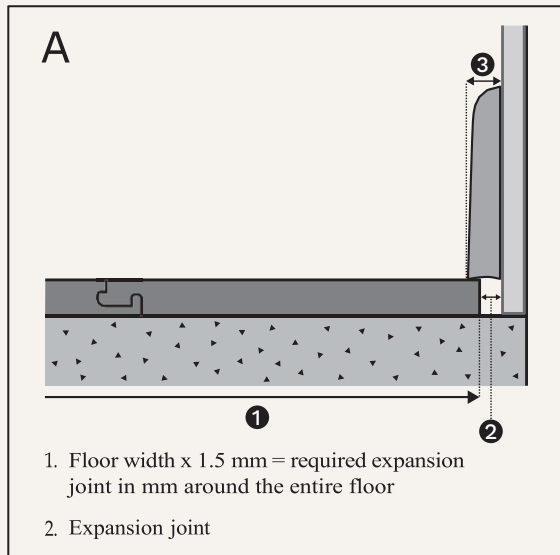
If you come across a damaged board, put it aside. It may be left over or can be used when finishing. Of course, you can also exchange it where you bought it. The installer is responsible for ensuring that boards with obvious defects are not installed.

Skirting board thickness

- Remember that it's the size of the expansion gap that decides the thickness of the skirting board – not the other way around.
- Larger floor areas will require wider expansion gaps and therefore thicker skirting.

Tip: If you are doing a renovation or new build, install the walling panels slightly higher up. That way the floor can move beneath them and you'll avoid having to use thick skirting boards. See image B.

How to calculate the thickness of the skirting board



Make sure the floor can move freely under the walling panels.

Minimum width of the expansion gap and skirting board for different floor widths

| FLOOR WIDTH 1 | EXPANSION GAP 2 | SKIRTING BOARD WIDTH 3 |
|---------------|-----------------|------------------------|
| 4 m | 6 mm | 15 mm |
| 6 m | 9 mm | 15 mm |
| 8 m | 12 mm | 18 mm |
| 10 m | 15 mm | 22 mm |
| 12 m | 18 mm | 27 mm |
| 15 m | 22 mm | 33 mm |
| 18 m | 27 mm | 40 mm |

*For easy installation, the minimum recommended expansion gap is 8 – 10 mm

Compliance - E3 Internal Moisture

Additional precautions are recommended in areas prone to water splashes, such as laundries and toilets. In such cases, the floor must be sealed around the perimeter to prevent moisture gaining access under the flooring raft. To comply with E3, silicone must be applied between all vertical surfaces (skirtings, kickers, end panels, etc.) and the Bjelin flooring 1.5 metres from sanitary appliances and fixtures, otherwise the remaining perimeter of kitchens typically do not require this perimeter treatment. Free and unrestricted movement must be provided around the entire perimeter, where possible. In the case of E3 requirements, additional control joints may be necessary to allow for adequate expansion.

Wet areas - expansion gap waterproof sealing

The expansion gap around the perimeter should be filled with a low-density foam backer rod. Apply a layer of clear, low-modulus silicone over the foam around the perimeter, ensuring that it creates a watertight barrier. This will prevent water from seeping underneath or along the sides of the flooring. This treatment will help safeguard your flooring from potential water damage in high-risk areas.

Care and maintenance of our floors

Bjelin Timber floors are easy to maintain. Daily maintenance is most easily done by vacuuming or soft broom, and occasional cleaning with a well wrung-out cloth. Take care not to damp-mop too often as wood is sensitive to water. When you do damp-mop the floor, it should be dry within 2–3 minutes, that way you'll know you have used the correct amount of water.

If you use too much water, the floor may be damaged.

If you accidentally spill, it won't leave a mark on your floor as long as you wipe it up immediately.

Use a door mat outside and inside the external door entrances to avoid bringing in dirt and grit, which can put a lot of wear on your floors. Minimising dirt and grit will ensure your Bjelin floor lasts for many years.

We recommend using felt pads under furniture to avoid unnecessary marks and scratches.

Replace hard office chair castor wheels with soft castors or install a protection mat under the chair according to DIN EN 12529 (type 'W' for soft castors). Bjelin recommends the use of Bona timber floor cleaning solutions and mops.

Dilute the cleaner with water and clean the floor with a damp microfibre cloth. **BEWARE!** Avoid excessive use of water. Excessive use of cleaning solutions can lead to a

buildup of soap on your floor, it is recommended to use neat water from time to time to strip back these built-up residues.

DO NOT allow rubber based materials to remain in contact for any period of time, as rubber can cause permanent staining.

Do **NOT** varnish, sand, polish etc. the Bjelin flooring. Products with wax, citrus or eucalyptus oil, soap, fabric softener or polish may leave behind residues.

Pet accidents should be cleaned up immediately.

Do **NOT** stick masking tape, packing tape or PVC tape to lacquered surface as this can form a very strong bond and may damage the lacquer when being removed.

If you get a stain on the floor, see the table below.

Take care with strong stain removers. If you use too much or rub too hard, it can affect the lacquer or oil on your floor.

For more detailed maintenance instructions, go to belgotex.co.nz

Factory-lacquered surfaces

| STAIN | REMOVAL |
|--|--|
| Asphalt, rubber, oil, shoe polish, soot, dried-in chocolate or grease residues | Bona Kemi Deep Cleaner diluted with water, alcohol cleaner, benzine or similar |
| Crayon, lipstick, felt tip/marker | Alcohol cleaner diluted with equal parts water |
| Candle wax, chewing gum | Cold spray or apply a bag of ice cubes, then gently scrape off |
| Blood | Cold water |

Factory-oiled surfaces

| STAIN | REMOVAL |
|--|--|
| Asphalt, rubber, oil, shoe polish, soot, dried-in chocolate or grease residues | Bona Kemi Deep Cleaner diluted with water, alcohol cleaner, benzine or similar |
| Crayon, lipstick, felt tip/marker | Alcohol cleaner diluted with equal parts water |
| Candle wax, chewing gum | Cold spray or apply a bag of ice cubes, then gently scrape off |
| Blood | Cold water |

Oiled surfaces are sensitive to strong detergents and heavy cleaning. After spot cleaning, some touch-up with oil may be needed on the oiled surface.

Glue down installation instructions

These instructions must be read in conjunction with the general Floating Installation Instructions.

Installing floors by gluing them down calls for extensive knowledge, both of the installation process and of the related conditions. Consequently, we recommend using a professional.

Preparation for glue down installation

In addition to the preparation advice laid out on page 2, the following guidelines apply when gluing down Bjelin Parquet Herringbone.

The strips can be glued onto surfaces such as concrete, levelling compound, floor particle board or plywood.

Before gluing down on a concrete subfloor, the moisture must be measured using one of the test methods prescribed by NZS AS 1881:2013. If the concrete RH is higher than 75% RH, a moisture barrier must always be used.

Note: Never assume the subfloor is dry. If moisture testing is not done, assume that the subfloor moisture is more than 75% RH and install a moisture barrier.

Normal and self-drying levelling compounds must be moisture tested and must not exceed 75% RH when the floor is installed with full surface bonding.

If there is a risk that RH will exceed 75%, a moisture barrier must be used on the levelling compound. Please note that if this is the case, the levelling compound manufacturer must approve the use of a moisture barrier on the levelling compound. The floor should be fully bonded to the subfloor using a modified silicone timber flooring adhesive.

Parquet herringbone flooring can be glued over underfloor heating. The heating system should provide effective, well-distributed heat across the whole floor. The surface temperature of the floor must never exceed 27°C (also applies where there are radiator pipes, under rugs and so on). A moisture barrier must be used if glued over underfloor heating.

Wood subfloors should not exceed 10-14%MC using test methods prescribed by NZS AS 1884:2013 for particle board, ply or solid wood subfloors. The wood subfloor should be free of deflection and be completely unfinished. If not, first roughen up the panels and remove all dust prior to gluing.

The subfloor must be free of loose particles and contaminants that may prevent proper adhesion.

Existing carpet, cork, linoleum, or vinyl (PVC) floor covering must be removed completely. After removal of the existing covering, the subfloor must be cleaned of all residual glue and checked for compliance with the requirements in the Installation section above.

Ambient conditions for glue down installation

- The air temperature in the space may not be less than 16°C and should preferably be between 16°C and 21°C.
- The Relative Humidity (RH) in the space may not be greater than 60% or less than 40%. These limit values may occur only for a limited period of time. The RH should preferably be 40% to 55% for an air temperature of approximately 20°C.
- The moisture content of the wood must be in balance with the RH of the indoor air, i.e. normally between 8% and 12%.

Moisture barrier and adhesive

Always ensure the moisture barrier is compatible with the adhesive being used. Preferably the same brand moisture barrier and adhesive are used. Always follow the moisture barrier and adhesive manufacturers advice for use of their products.

Installation

Follow the general instructions for setting out and laying down Parquet herringbone strips on page 3.

It is recommended that you test-lay a few rows without adhesive to familiarise yourself with the installation procedure. Spread the adhesive amount based on how many strips you can lay within 10-15 minutes. Make sure you lay the strips onto wet glue, before a film starts forming. Ideally, wait a few hours for the initial strips to settle into the glue before continuing.

Immediately wipe off any adhesive on top of the board.
NOTE: Refer to the “Preventing adhesive contamination of the floor surface” section below for advice on proper adhesive clean-up.

To ensure minimum 85% adhesive transfer to the back of the timber flooring, the use of weights may be required.

Preventing adhesive contamination of the floor surface

Take care to avoid adhesive contamination on the surface of Bjelin Parquet Herringbone Flooring during installation. When closing end joints, ensure hands and hand tools remain free of adhesive to prevent contamination on the floor surface. This approach maintains a clean finish and achieves a tight, secure connection between planks.

Minimising contamination is essential, as cleanup can be challenging even for small areas. Adhesive residue is often difficult to spot when viewed directly from above, so inspect using raking or critical light (angled illumination) while standing back to identify any traces.

Glue down installation instructions

If adhesive contacts the surface, remove it immediately – ideally on the same day of installation – since it becomes harder to eliminate over time and may be impossible once fully cured. Follow the adhesive manufacturer's guidelines for safe removal techniques that avoid damaging the floor. Care must be taken to not abrade or polish the floor surface; microfibre cloths are recommended for clean-up.

Solvents should be applied sparingly so as to not flood the joints. After cleaning, re-inspect from a distance under angled lighting to confirm no residual staining or marks remain, repeating the process as needed until the surface is completely clean and residue-free.



Checklist

- Remove all skirting boards.
- Remove or trim door frames and architraves.
- Calculate the expansion gap between the floor and all fixed objects such as walls, thresholds, columns and pipes.
- Determine the herringbone flooring layout before commencing installation.
- Tip for glue down installation: Test-lay first few rows of strips without glue to familiarise yourself with the installation procedure.



Tools and equipment:

- String line
- Set-square
- Protective eyewear and approved dust mask
- A suitable adhesive spreader
- Floor adhesive
- Wedges
- Saw
- Metal or diamond saw blade
- Pencil
- Folding rule
- Adjustable set square
- Exterior (Cross-linking) PVA wood glue

Wood Dust

Sawing and sanding wood produce wood dust.

Preventative Measures

- Equipment should be equipped with a dust collector to reduce airborne wood and dust.
- Use an appropriately designed protective mask to reduce exposure to airborne wood dust.
- Avoid contact with the eyes and skin.
- In case of irritation, rinse eyes and skin with water for at least 15 minutes.
- In case of severe discomfort, seek medical attention immediately.



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