Barracuda

JAMES & TAYLOR
SOLUTIONS OUTSIDE THE BOX

BRICK SLIP REPLACEMENT GUIDE

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Barracuda Brick Slip System – Brick Slip Replacement Guide

Potential Causes of Damage

Because the Barracuda brick slip system utilises 40mm thick brick slips, the system is very robust. However, at some point during its ‘service life’, a brick slip or in extreme cases an area of brick slips and other components may become damaged and require replacement.

The most common cause of damage is likely be some form of ‘mechanical’ accidental impact. This might be, most typically, accidental impacts during building maintenance caused by impacts from building maintenance machinery or equipment. Accidental vehicular impacts, most often at loading bay and delivery locations or close to public and staff parking areas. Impacts from most ‘thrown objects’ and impacts due to typical deliberate vandalism are unlikely to cause more than superficial damage.

Assessment of Damage

It is important to carry out a thorough but pragmatic assessment of any damage. A brick that exhibits a ‘hair line’ type crack is unlikely to require replacement due to any loss of functional performance. The Barracuda brick slip system, is, like almost every other brick slip system, a ‘rainscreen’. This means that at least a small amount of rainwater will find its way through both the brick slips and the mortar joints even if they are in perfect undamaged condition. The brick slip system and the cavity are designed to be ‘drained and ventilated’, so, that water which enters the cavity, is managed by features situated within the cavity, which enable the water to drain harmlessly from the bottom of the cavity.

Tools and Materials Required for Brick Slip Replacement

1. Good quality ‘Tape Measure' [or Ruler].
2. 150mm diameter ‘Diamond Masonry Cutting Disc’ [typically 2.5mm thickness].
3. 230mm [disc diameter capacity] ‘Disc Cutter/Angle Grinder’.
4. Large ‘flat blade’ Screw Driver.
5. Small sharp ‘Cold Chisel’.
6. Replacement Brick Slip[s] 40mm thick [and appropriately rebated if necessary].
7. Blond Dead Blow Mallet [see tool type No.12 shown on page 2 of Barracuda Installation Guide].
8. Sufficient quantity of mortar, matching that used during the original installation. James & Taylor recommend the use of CPI Euromix mortar M1ANPM000 [or an Alternative mortar with equivalent usage and performance characteristics].
9. Bottom Brick Slip Installation Tool [if replacing a bottom brick slip. See tool type No. 11 shown on page 2 of Barracuda Installation Guide].
10. Mortar Applicator [see tool type No.16 shown on page 2 of Barracuda Installation Guide].
11. Joint Finishing Tool [see tool type No.17 shown on page 2 of Barracuda Installation Guide].

The Brick Slip Replacement Process

This document and the following step by step guide show the correct, Barracuda Brick Slip System, brick slip replacement process. The process principles are the same but the process routes vary slightly, dependent upon whether a ‘mid-position’ or ‘top’ or ‘bottom’ brick requires replacement. It is also recommended that you familiarise yourself with the ‘Barracuda Installation Guide’, which would have informed the original installation.

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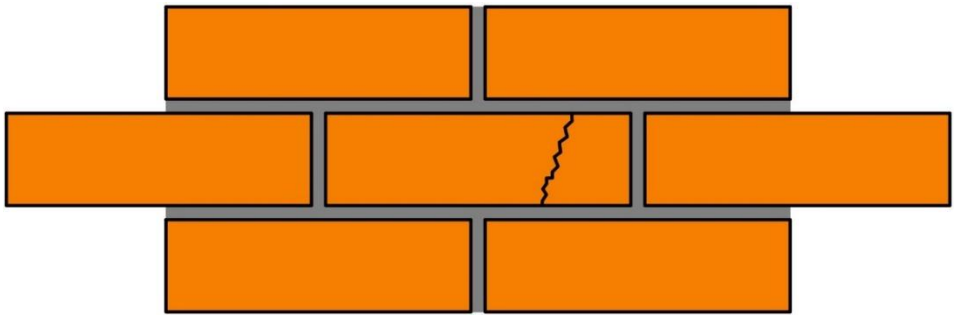
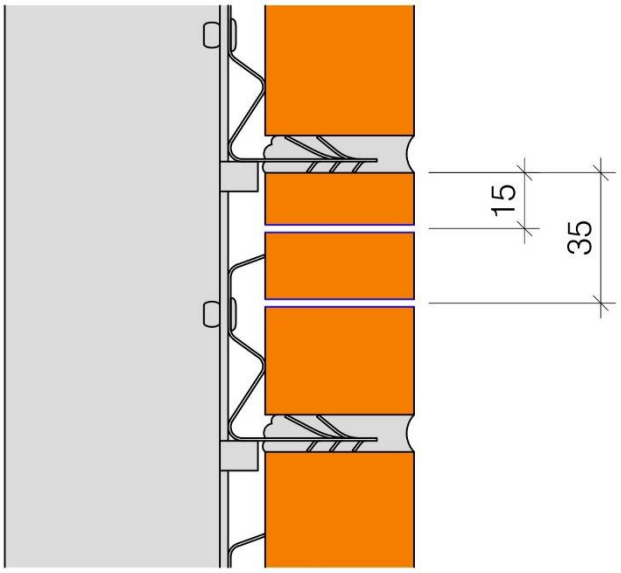
The Replacement of a Mid-Position Brick Slip

Step 1.



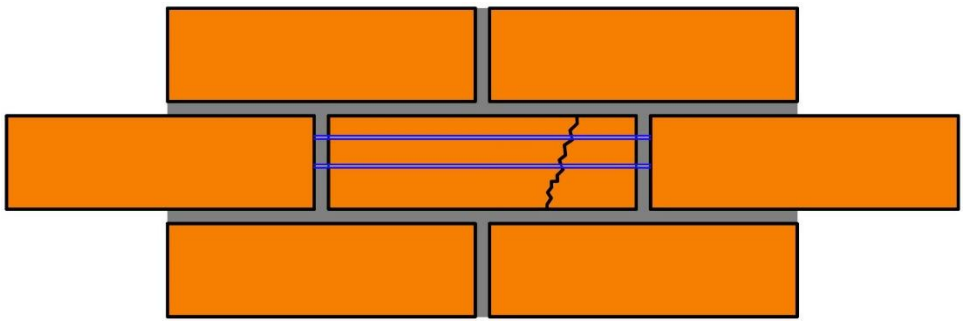
Identify the damaged brick slip and assess whether the brick slip is sufficiently damaged to require replacement.

Step 2.



If the brick slip does require replacement, carefully mark two horizontal cut positions onto the face of the damaged brick slip. The centre of one cut must be 15mm below the top of the damaged brick slip and the centre of the other, 35mm below the top of the damaged brick slip.

Step 3.



Using the 150mm diamond cutting disc, start to make two [initially shallow] cuts for the full length of the damaged brick slip, extending into the perpend joints between the damaged brick slip and the adjacent brickwork. Be careful not to cut into the adjacent brickwork.

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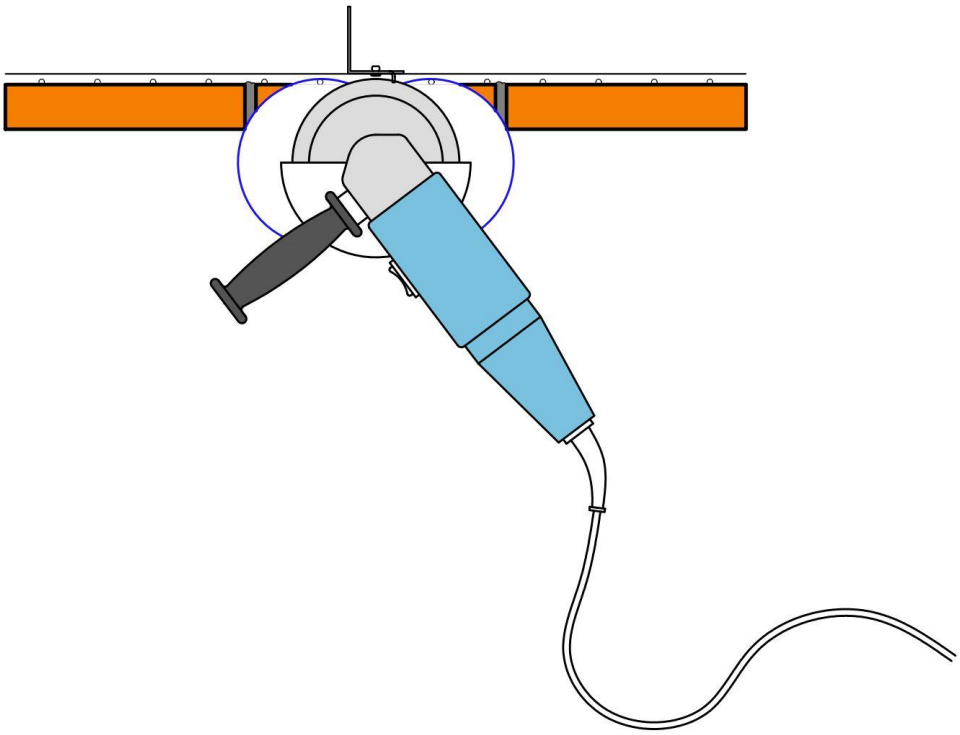
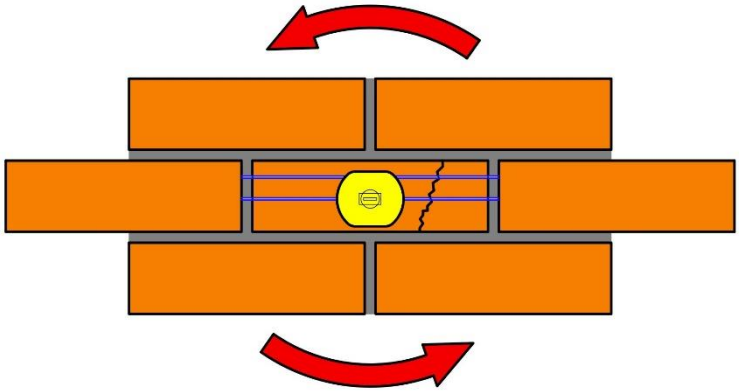
Step 4.



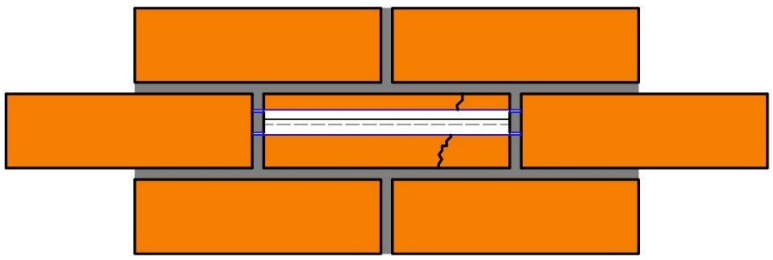
Using the 150mm diameter diamond cutting disc, cut all the way through the damaged brick slip, ensuring that the cut depth is no greater than 42mm and that the cuts do not extend into the adjacent brickwork. A small ‘quadrant’ of brick slip will remain un-cut, which will need to be broken. Be careful not to cut into the Barracuda rail, its fastenings or sub-structure.

Step 5.



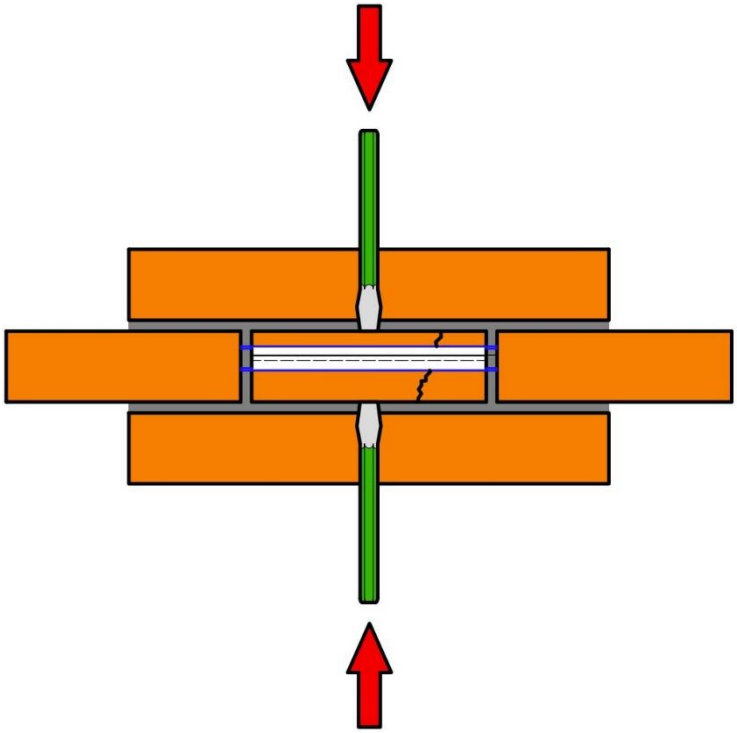
Insert the large ‘flat blade screw driver into the middle of each cut. Twist the screw driver to fracture the middle portion of the damaged brick slip.

Step 6.



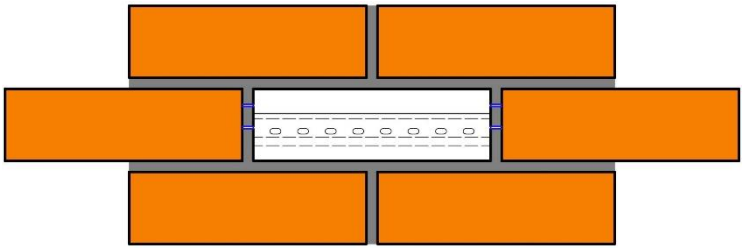
Remove the middle portion of the damaged brick slip.

Step 7.



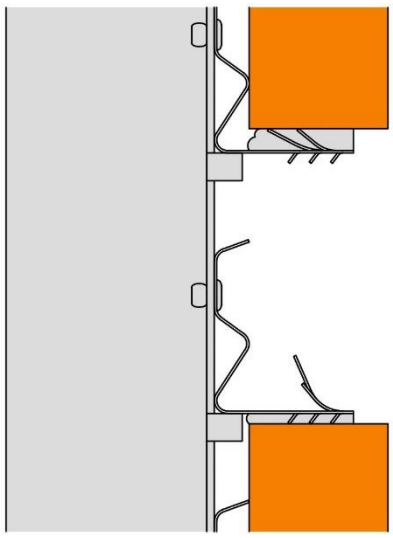
Using the small sharp cold chisel, carefully break out the top and bottom portions of the damaged brick slip.

Step 8.



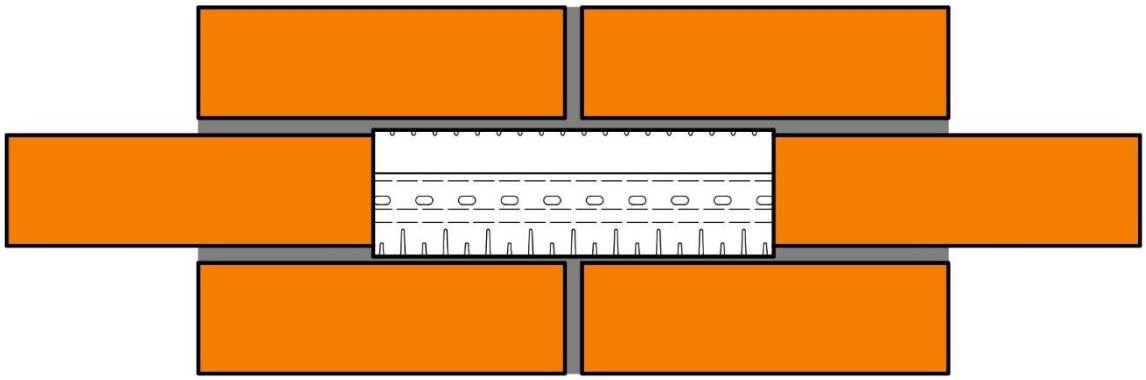
Start to carefully remove the mortar that surrounded the damaged brick slip.

Step 9.



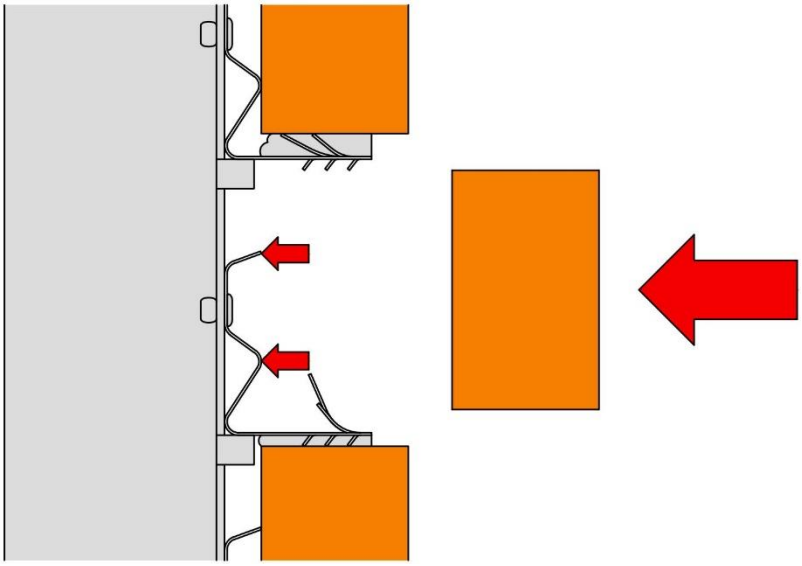
Carefully remove the mortar that encapsulates the horizontal rail teeth and dress the mortar back to the leading edge of the horizontal rails as shown. The teeth are extremely durable and can be bent upwards so that they effectively capture the replacement brick slip.

Step 10.



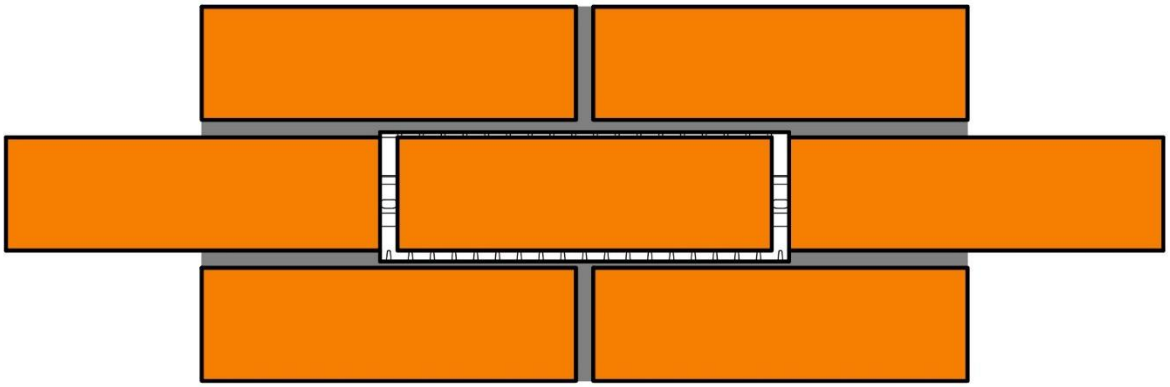
Remove the mortar from the vertical joints. The finished, prepared surfaces, should look like this.

Step 11.



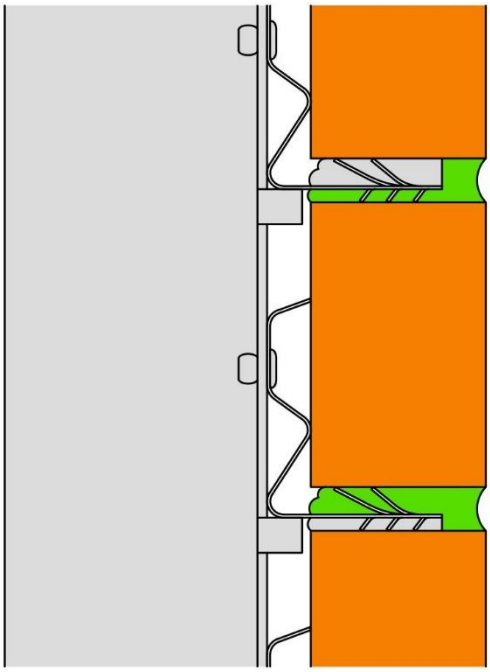
Blow or vacuum any brick and mortar dust from the surfaces of the Barracuda rails and the adjacent brickwork and push the replacement brick slip into position. Use the blond dead blow mallet if necessary.

Step 12.



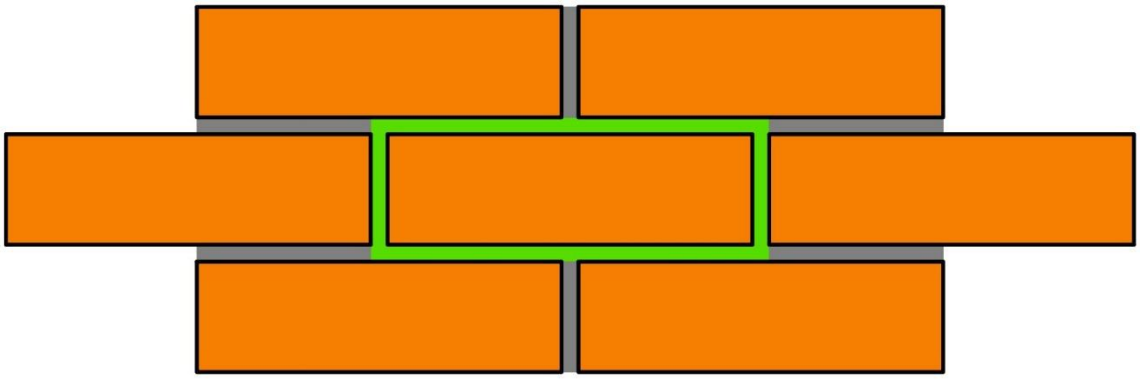
Make sure that the replacement brick slip is fully inserted and secure, and that the width of the vertical joints each side of the replacement brick slip are approximately equal.

Step 13.



Carefully inject mortar, matching that used during the original construction, into all of the joints that surround the replaced brick slip. Take care to ensure that mortar penetrates a minimum of 30mm into all of the joints. Take particular care to ensure that mortar penetrates a minimum of 30mm into the uppermost horizontal joint. The new mortar is shown in green. James & Taylor recommend the use of CPI Euromix mortar M1ANPM000 [or an alternative mortar with equivalent usage and performance characteristics].

Step 14.



Fill all of the joints so that they are just proud of the surface of the brick slips. Fill all of the joints adequately so that when they are ‘tooled off’, the mortar is suitably compacted by the tooling off process. The mortar joint face profile must be a shallow [22mm or 7/8”] ‘Bucket Handle’ profile. Never inject mortar into the Barracuda brick slip support system when it is too cold [below the minimum temperature recommended by the mortar manufacturer] or when it is likely to become too cold before the mortar has adequately set. Never mortar when it is raining unless you can be certain that the work area/brick slips are adequately protected/shielded from the rain. Allow 28 days for the mortar to attain its maximum [working] strength. Care must be taken to ensure that the replacement brick slip is not subjected to any significant impacts or other disturbance during this 28 day period.

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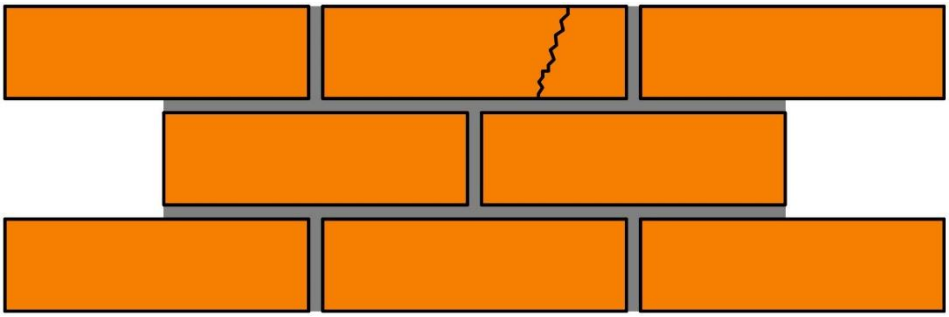
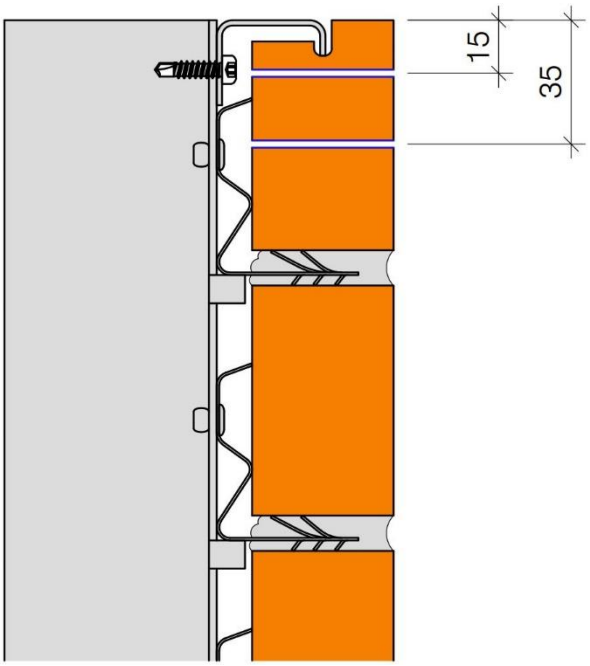
The Replacement of a Top Brick Slip

Step 1.



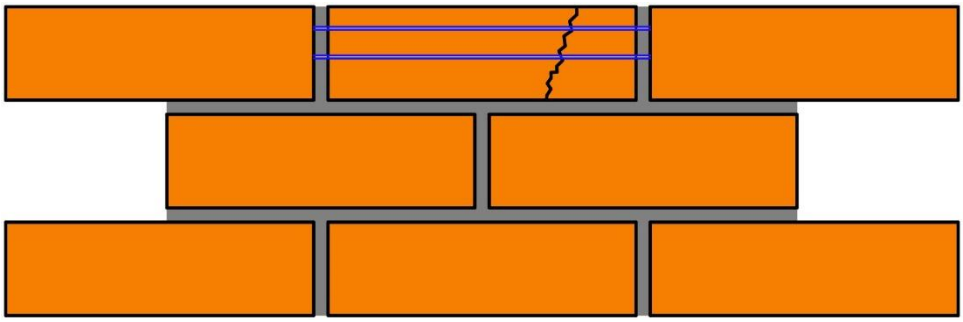
Identify the damaged brick slip and assess whether the brick slip is sufficiently damaged to require replacement.

Step 2.



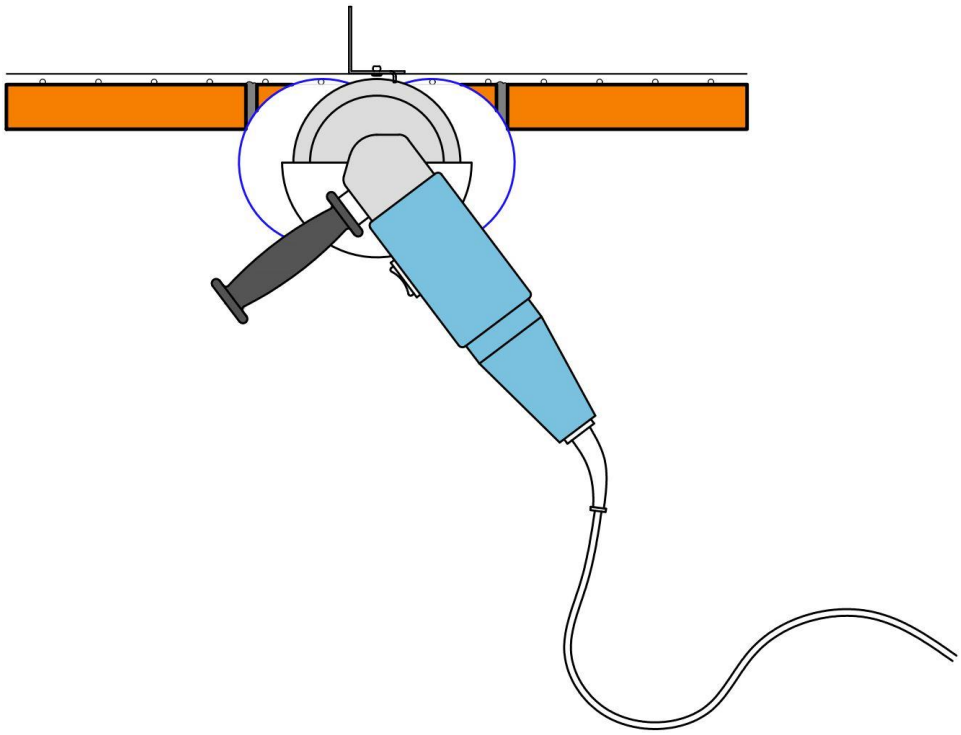
If the brick slip does require replacement, carefully mark two horizontal cut positions onto the face of the damaged brick slip. The centre of one cut must be 15mm below the top of the damaged brick slip and the centre of the other, 35mm below the top of the damaged brick slip.

Step 3.



Using the 150mm diamond cutting disc, start to make two [initially shallow] cuts for the full length of the damaged brick slip, extending into the perpend joints between the damaged brick slip and the adjacent brickwork. Be careful not to cut into the adjacent brickwork.

Step 4.

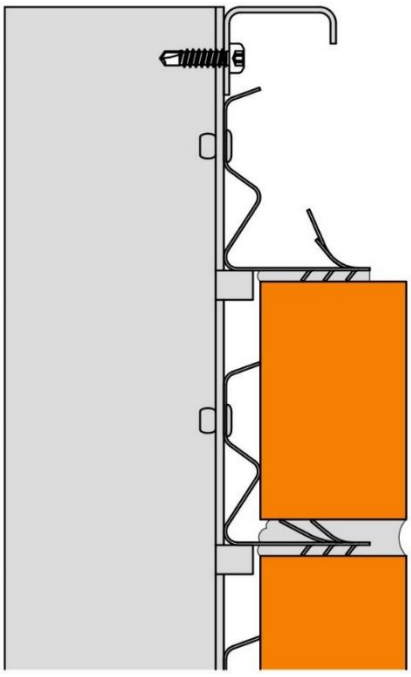


Using the 150mm diameter diamond cutting disc, cut all the way through the damaged brick slip, ensuring that the cut depth is no greater than 42mm and that the cuts do not extend into the adjacent brickwork. A small ‘quadrant’ of brick slip will remain un-cut, which will need to be broken. Be careful not to cut into the Barracuda rail, its fastenings or sub-structure.

Steps 5. 6. 7. and 8.

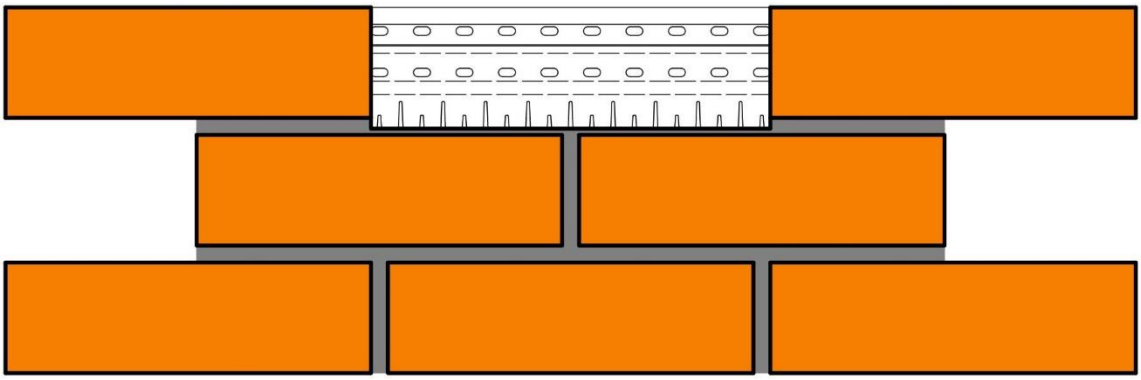
These process steps are the same as for a Mid-Position Brick Slip. Please refer to pages 3 & 4 of this guide.

Step 9.



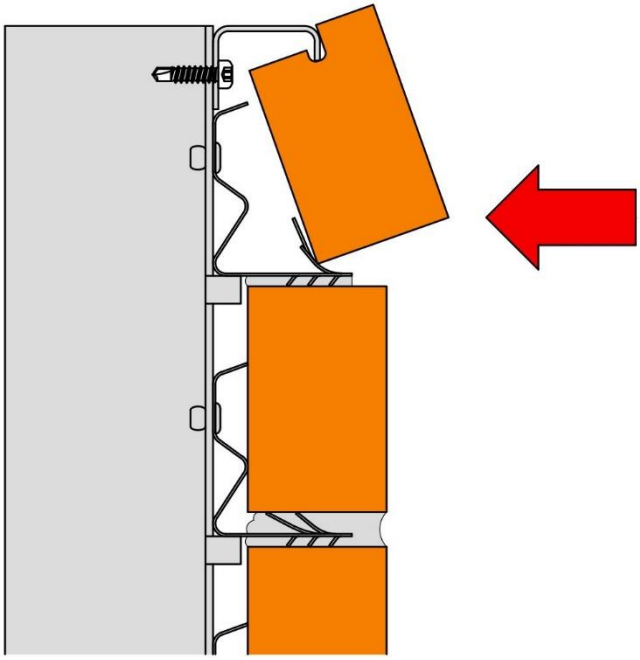
Carefully remove the mortar that encapsulates the horizontal rail teeth and dress the mortar back to the leading edge of the horizontal rails as shown. The teeth are extremely durable and can be bent upwards so that they effectively capture the replacement brick slip.

Step 10.



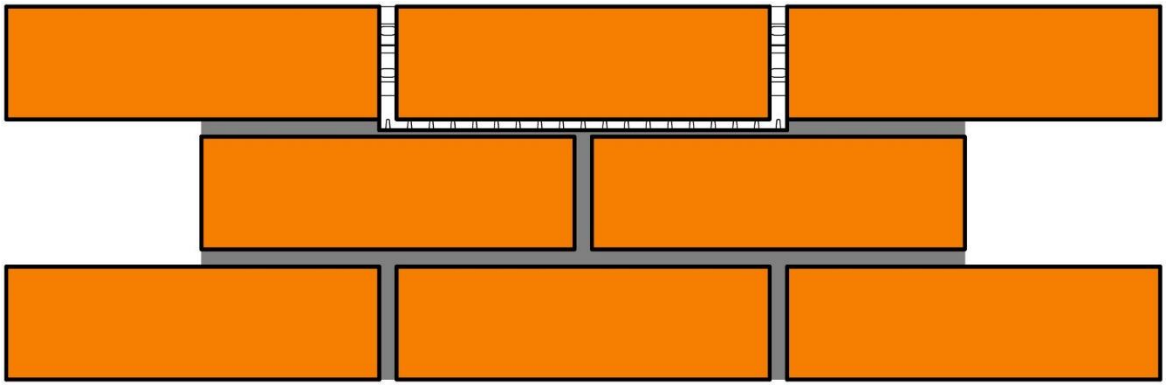
Remove the mortar from the vertical joints. The finished, prepared surfaces, should look like this.

Step 11.



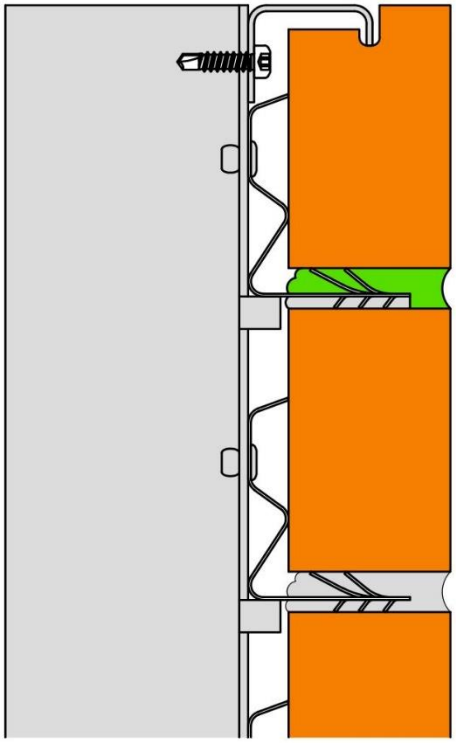
Blow or vacuum any brick and mortar dust from the surfaces of the Barracuda rails and the adjacent brickwork and push the replacement brick slip into position. Use the blond dead blow mallet if necessary.

Step 12.



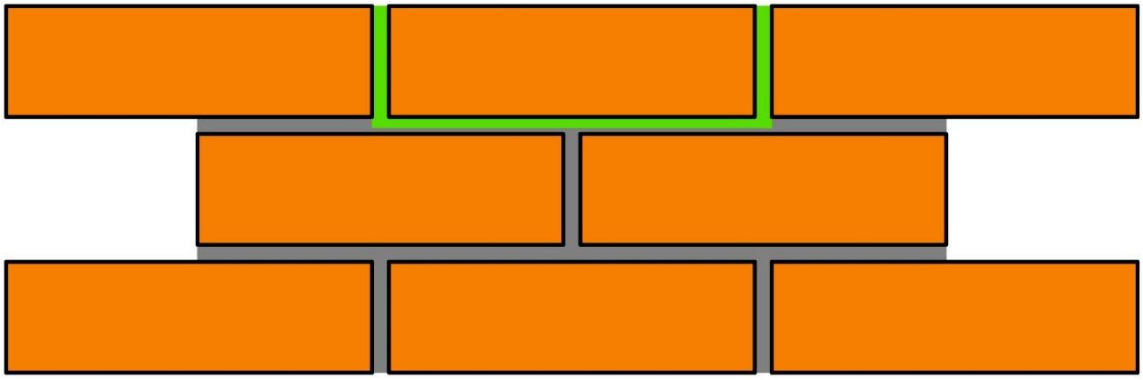
Make sure that the replacement brick slip is fully inserted and secure, and that the width of the vertical joints each side of the replacement brick slip are approximately equal.

Step 13.



Carefully inject mortar, matching that used during the original construction, into all of the joints that surround the replaced brick slip. Take care to ensure that mortar penetrates a minimum of 30mm into all of the joints. Take particular care to ensure that mortar penetrates a minimum of 30mm into the uppermost horizontal joint. The new mortar is shown in green. James & Taylor recommend the use of CPI Euromix mortar M1ANPM000 [or an alternative mortar with equivalent usage and performance characteristics].

Step 14.



Fill all of the joints so that they are just proud of the surface of the brick slips. Fill all of the joints adequately so that when they are ‘tooled off’, the mortar is suitably compacted by the tooling off process. The mortar joint face profile must be a shallow [22mm or 7/8”] ‘Bucket Handle’ profile. Never inject mortar into the Barracuda brick slip support system when it is too cold [below the minimum temperature recommended by the mortar manufacturer] or when it is likely to become too cold before the mortar has adequately set. Never mortar when it is raining unless you can be certain that the work area/brick slips are adequately protected/shielded from the rain. Allow 28 days for the mortar to attain its maximum [working] strength. Care must be taken to ensure that the replacement brick slip is not subjected to any significant impacts or other disturbance during this 28 day period.

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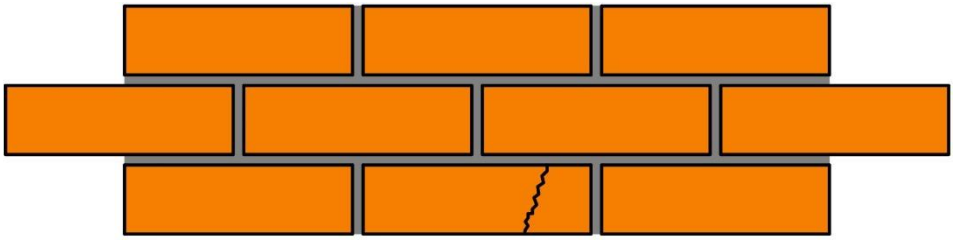
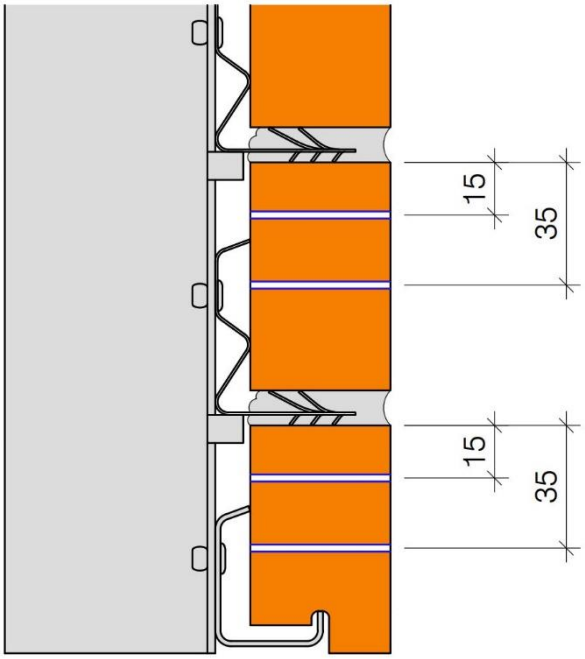
The Replacement of a Bottom Brick Slip

Step 1.



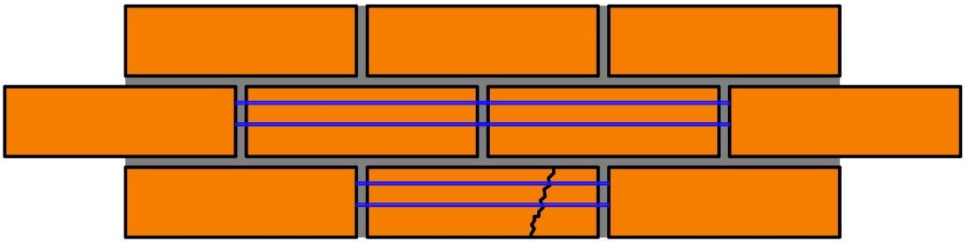
Identify the damaged brick slip and assess whether the brick slip is sufficiently damaged to require replacement.

Step 2.



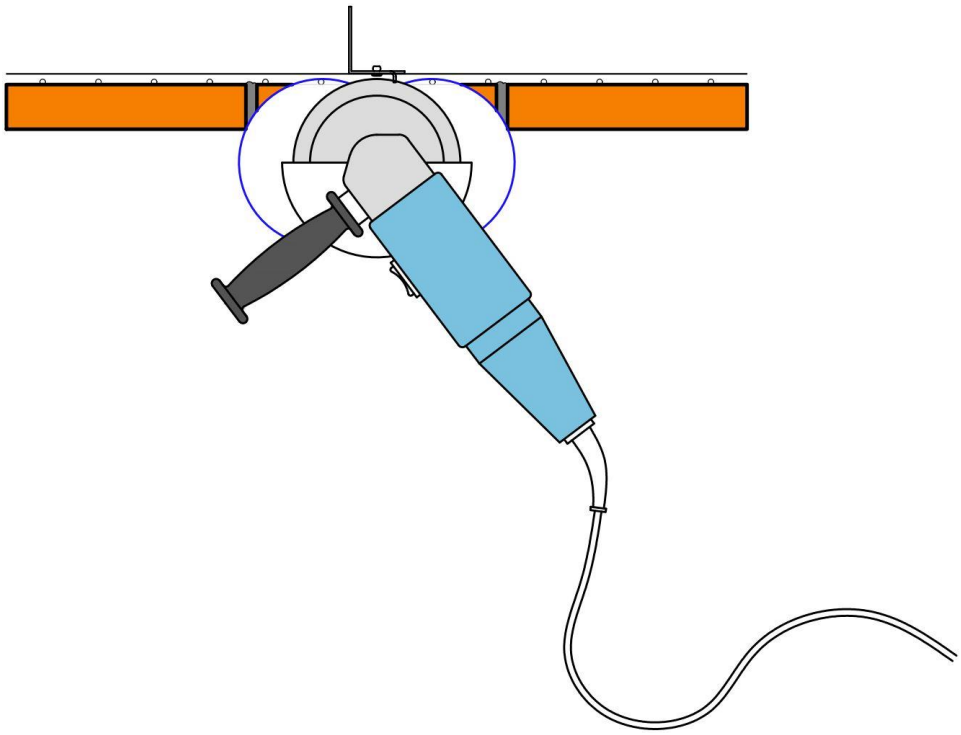
If the brick slip does require replacement, carefully mark two horizontal cut positions onto the face of the damaged brick slip and the two brick slips immediately above the damaged brick slip. The centre of one cut must be 15mm below the top of each brick slip and the centre of the other, 35mm below the top of each brick slip.

Step 3.



Using the 150mm diamond cutting disc, start to make two [initially shallow] cuts for the full length of the damaged brick slip, and the two brick slips immediately above. Extend these cuts into the perpend joints between the brick slips that require removal and the adjacent brickwork. Be careful not to cut into the adjacent brickwork.

Step 4.

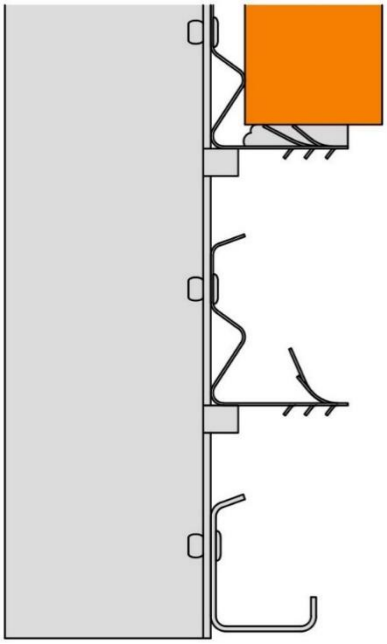


Using the 150mm diameter diamond cutting disc, cut all the way through the damaged brick slip, and the two brick slips immediately above. Ensure that the cut depths are no greater than 42mm and that the cuts do not extend into the adjacent brickwork. A small ‘quadrant’ of each brick slip will remain un-cut, which will need to be broken. Be careful not to cut into the Barracuda rail, its fastenings or sub-structure.

Steps 5. 6. 7. and 8.

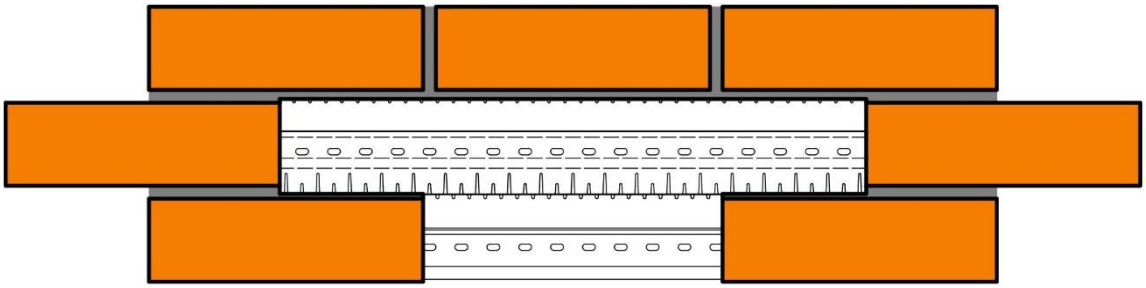
These process steps are the same as for a Mid-Position Brick Slip. Please refer to pages 3 & 4 of this guide.

Step 9.



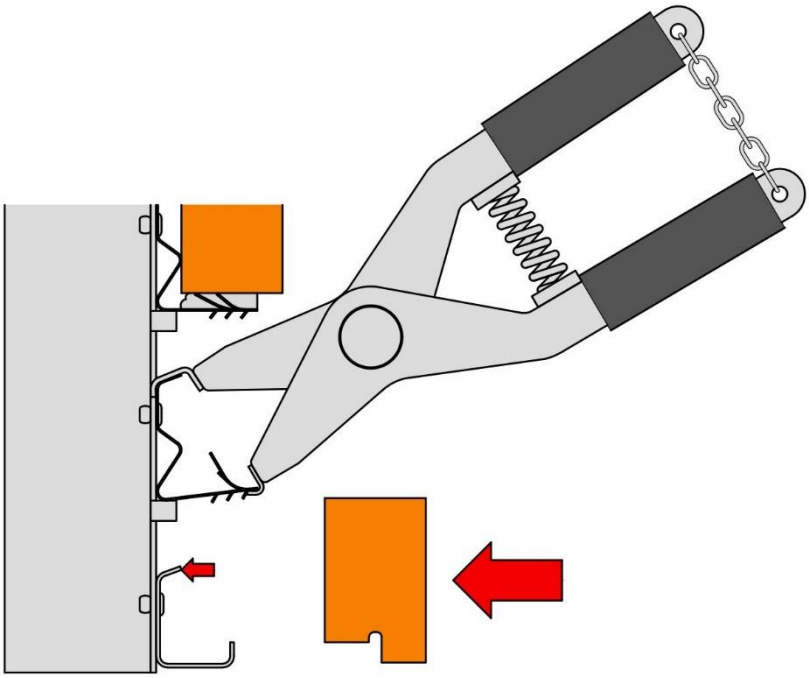
Carefully remove the mortar that encapsulates the horizontal rail teeth and dress the mortar back to the leading edge of the horizontal rails as shown. The teeth are extremely durable and can be bent upwards so that they effectively capture the replacement brick slips.

Step 10.



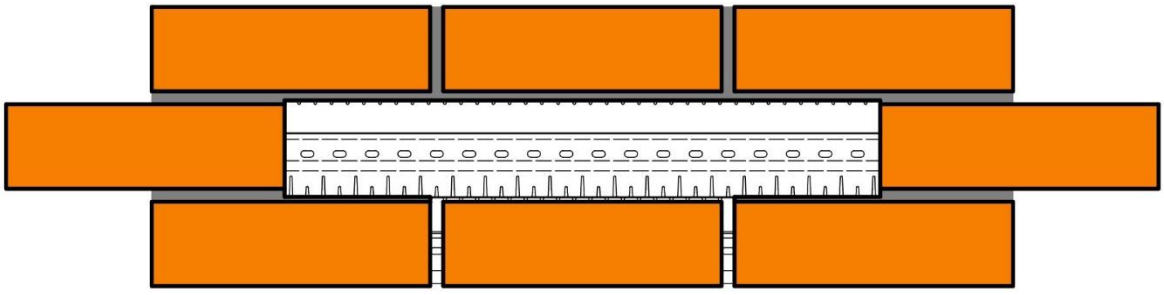
Remove the mortar from the vertical joints. The finished, prepared surfaces, should look like this.

Step 11.



Blow or vacuum any brick and mortar dust from the surfaces of the Barracuda rails and the adjacent brickwork. Use the Bottom Brick slip Installation Tool to compress the rail above the centre of the damaged brick slip location and push the replacement brick slip into position. Use the blond dead blow mallet if necessary.

Step 12.



Make sure that the replacement brick slip is fully inserted and secure, and that the width of the vertical joints each side of the replacement brick slip are approximately equal.

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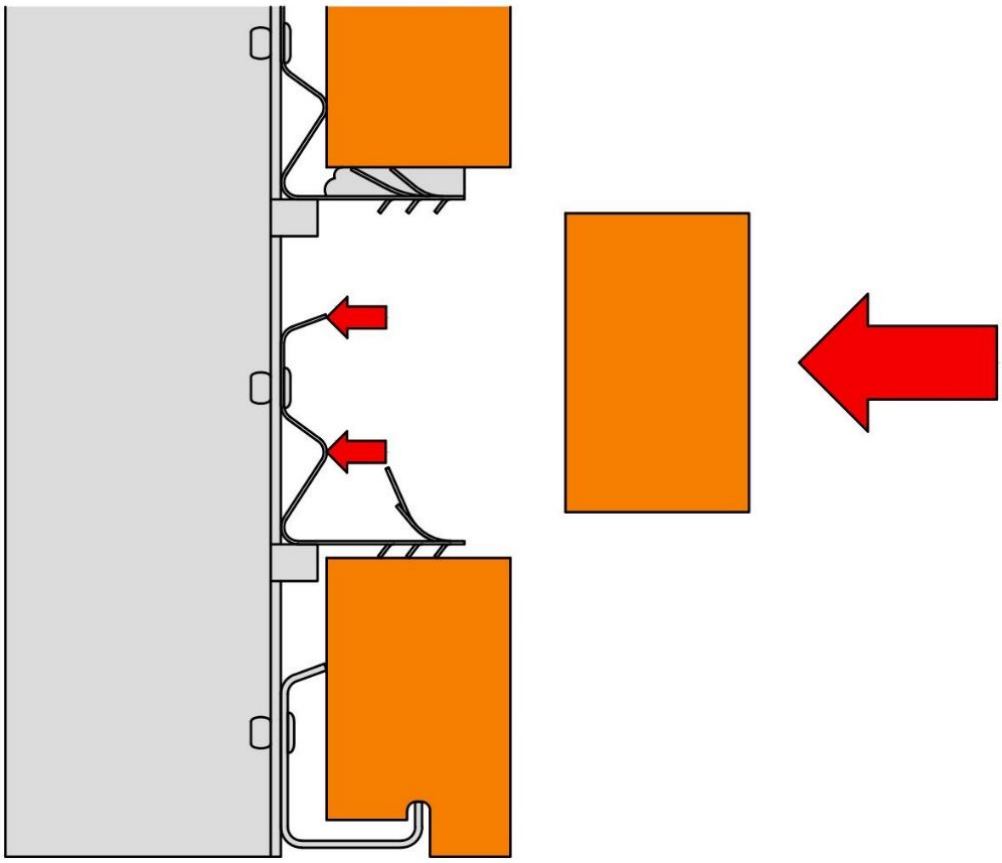
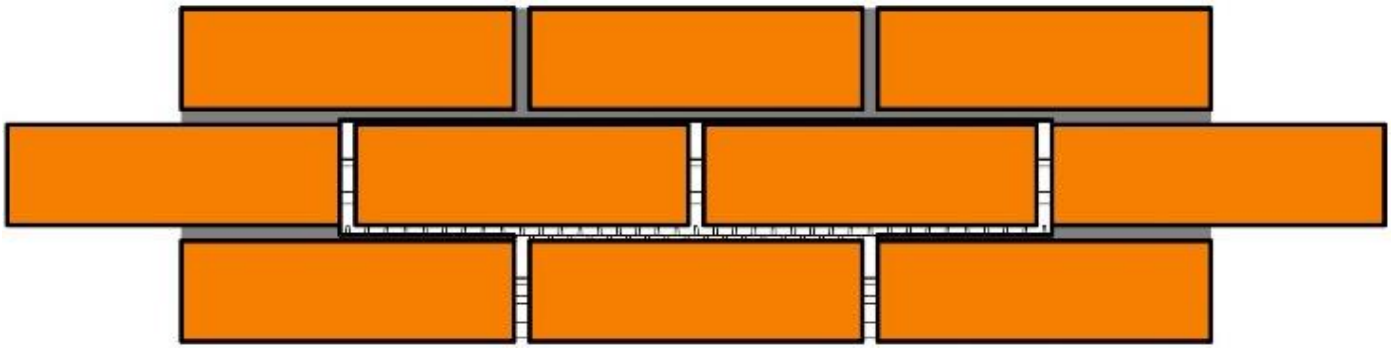
Step 13.



Push the replacement brick slips into place in the course immediately above the replacement brick location. Use the blond dead blow mallet if necessary.

Step 14.



Make sure that all replacement brick slips are fully inserted and secure and that the width of the vertical joints each side of the replacement bricks are approximately equal.

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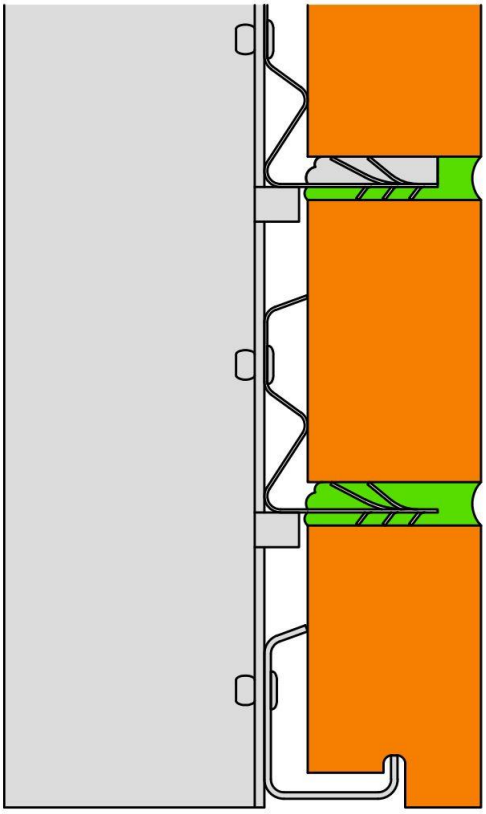
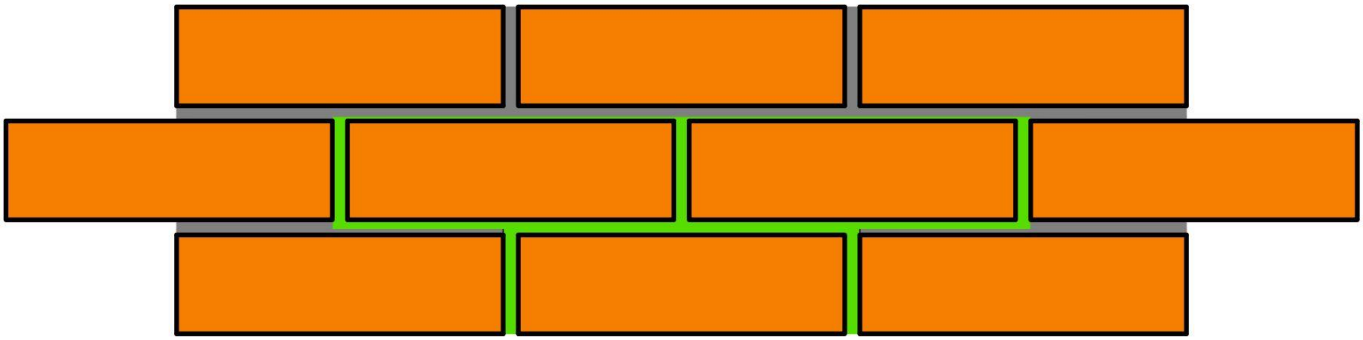
Step 15.



Carefully inject mortar, matching that used during the original construction, into all of the joints that surround the replaced brick slips. Take care to ensure that mortar penetrates a minimum of 30mm into all of the joints. Take particular care to ensure that mortar penetrates a minimum of 30mm into the uppermost horizontal joint. The new mortar is shown in green. James & Taylor recommend the use of CPI Euromix mortar M1ANPM000 [or an alternative mortar with equivalent usage and performance characteristics].

Step 16.



Fill all of the joints so that they are just proud of the surface of the brick slips. Fill all of the joints adequately so that when they are ‘tooled off’, the mortar is suitably compacted by the tooling off process. The mortar joint face profile must be a shallow [22mm or 7/8”] ‘Bucket Handle’ profile. Never inject mortar into the Barracuda brick slip support system when it is too cold [below the minimum temperature recommended by the mortar manufacturer] or when it is likely to become too cold before the mortar has adequately set. Never mortar when it is raining unless you can be certain that the work area/brick slips are adequately protected/shielded from the rain. Allow 28 days for the mortar to attain its maximum [working] strength. Care must be taken to ensure that the replacement brick slips are not subjected to any significant impacts or other disturbance during this 28 day period.