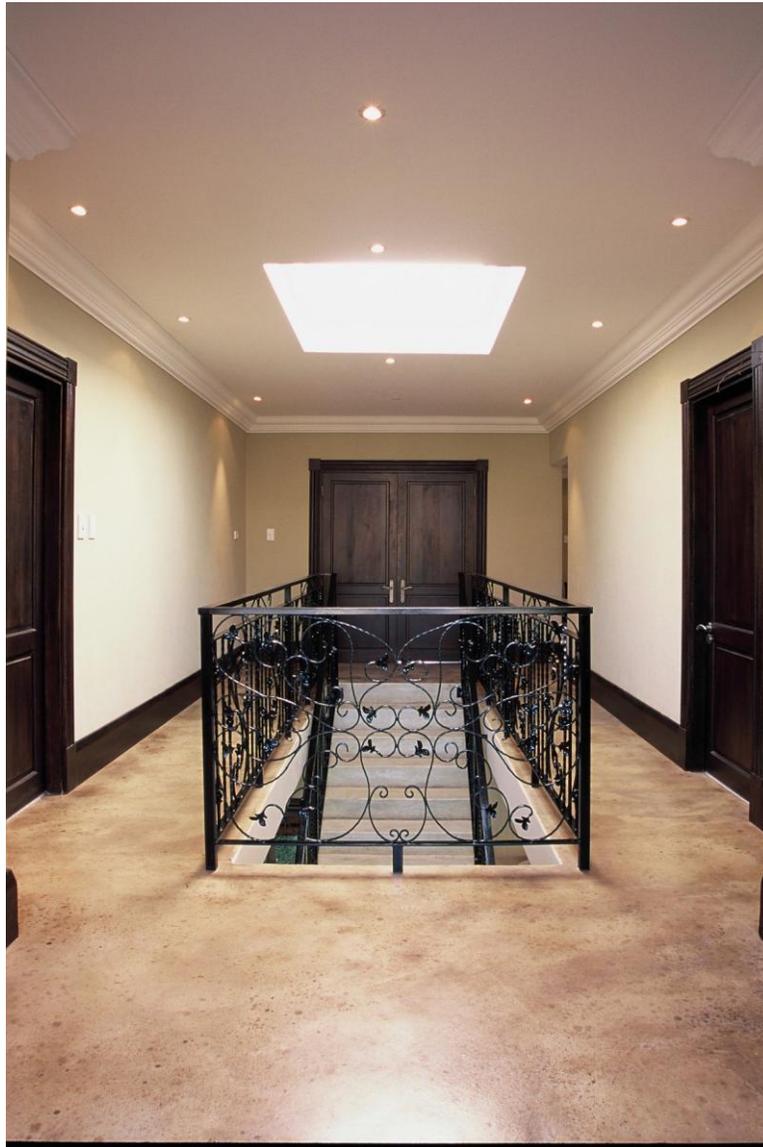


CORNICE INSTALLATION MANUAL (NMC - NOMASTYL)



**compiled by Mr. Trevor Spencer
Euro-Pacific Marketinc CC
South Africa**

Cornice Installation Manual

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1. INTRODUCTION

Cornice installation, like any skill, follows the typical principle: It is easy to learn the basics, a little more difficult to learn advanced techniques, and very satisfying once a level of competency is reached through repetition and practice.

A “can-do” attitude goes a long way in difficult situations. If you’re willing to try it, you’re probably able to achieve it!

2. GETTING STARTED

2.1 Tools / Equipment

In the Toolbox:

- Hammer
- Panel Pins
- Fluted concrete nails
- Pencil
- Tape Measure
- Utility knife (retractable “snap-off” blade type)
- Paint Scraper (x2) (100mm-wide blade).
- Chalk Line
- Sand-paper (100 grit)

Equipment Required:

Mitre Box & Saw
Ladders (2)
Trestle table, or work surface
(Leveling blocks)

Cleaning:

Bucket (& Water)
Sponge
Damp rag for cleaning hands
Bin bags for scraps

Tip: On a trade level, where possible, use an assistant for applying adhesive and filling/cleaning.

3. SURFACE PREPARATION / ADHESION

Paint-primed surfaces offer best adhesion. Worst, is raw plaster as sand particles compromise adhesion. Bare skimmed walls and ceilings (Rhinolite) do not offer good long-term adhesion, and should be primed/sealed.

Note: Some plaster primers contain solvents and must be applied before corncicing as they melt polystyrene. Acetone, used to clean silicone adhesives is also harmful to polystyrene.

NMC Cornices successfully adhere to the following materials: Plaster, paint, wood, synthetic woods (MDF), formica, glass, ceramic tiles, porcelain tiles, glass.

4. INSTALLATION

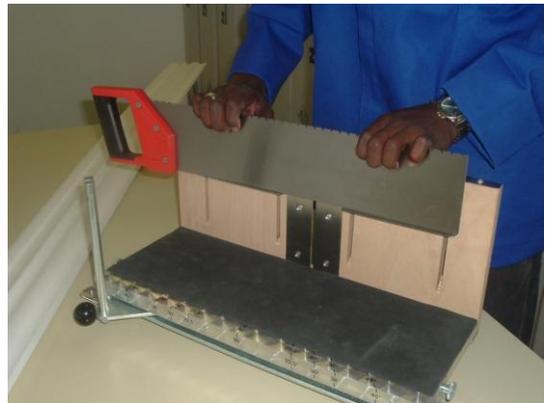
4.1 Set the Mitre Box

Tip: The base of the mitre box represents the ceiling; the “wall” of the mitre box represents the [house] wall.

Place the cornice profile to be installed in the mitre box and set the fence so that the cornice is square to the mitre box. – Tighten nuts. (See Pic 1). Using your saw, check that the fences are correctly lined up. (See Pic 2)



Pic 1



Pic 2

4.2 Make a Gauge

Transfer the mitre box setting to the gauge. (The accuracy of this “transfer” will be evident in the accuracy of the mitre cuts) (Pic 3)

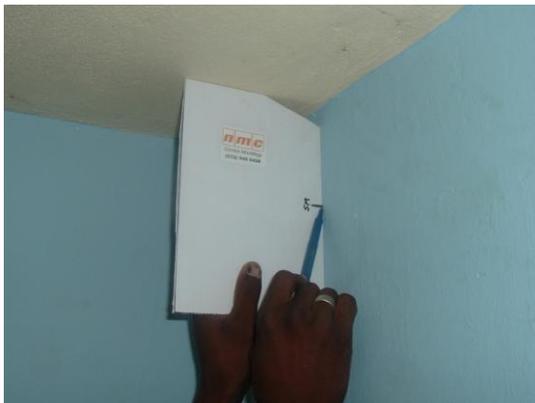


Pic 3

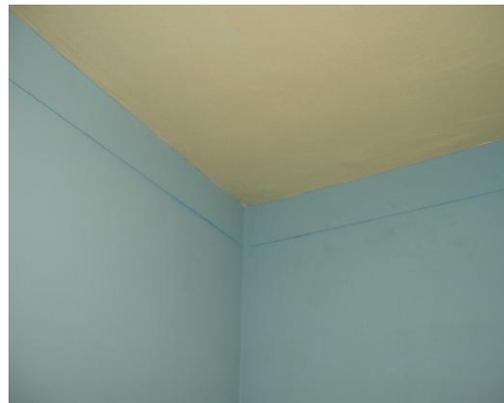
Tip: It is useful to cut out a section of the gauge so that the “reading” is taken from where the cornice will be positioned and not where ceiling meets wall, as “buildup” of excess plaster can render the measurement inaccurate. (See Pic 3)

4.3 Chalk Line

Using the gauge, mark off in pencil, and spring a chalk line. (Pic 4 & 5).



Pic 4



Pic 5

Tip: Mark the entire room before commencing corning. Any compensation required due to out-of-level or bowed ceilings will become evident

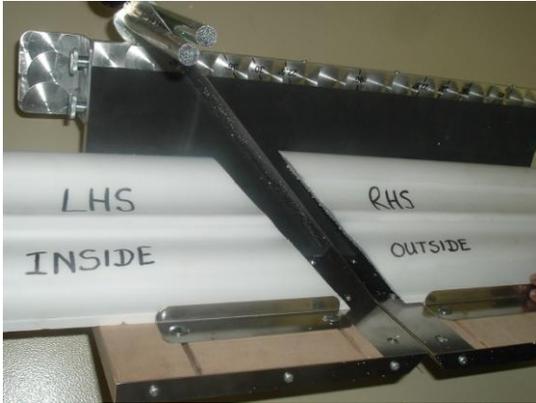
4.4 Mitres

Picture framing is an example of a simple mitre – the frame lies flat, and is cut at 45 degrees.

Corning requires a compound mitre: The cornice is placed in the mitre box at 45 degrees, and then a 45 degree cut is applied over this.

There are 4 basic cuts: **Inside corner Left & Right /Outside cornice Left & Right**

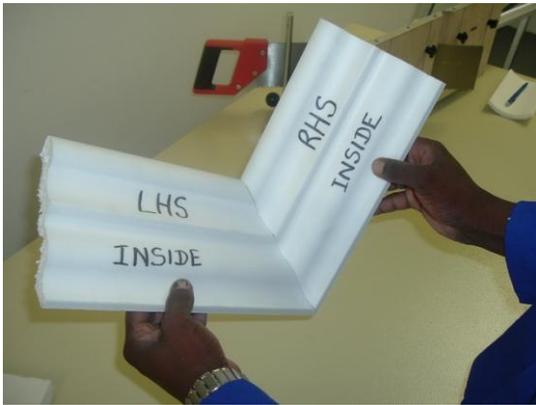
Since there are only 2 directions to the mitre box, the “inside” and “outside” cut is determined by which side of the cut is discarded, and which is used. (Pic 6 & 7)



Pic 6



Pic 7



Pic 8



Pic 9

Tip: If the mitre box has not been used before, cut a piece of cornice in each direction. Join the two pieces to ensure that they are the same length. If they do not join properly, the mitre box MAY be faulty, but the problem is probably just inconsistent handling of the saw. (There is much scope for variation in the wrist's action) See Pics 8 & 9

Tip: To minimize wastage, alternate the direction of work for each room done. This will provide a more useful pile of off-cuts for when the final smaller cuts are required.

Measure, and cut the first length. (See Pic 10 & 11)



Pic 10



Pic 11

4.5 Apply Adhesive

Adhesive is generally applied by means of a paint scraper along the glue-bed. 5mm thick is sufficient. A common error is to use too much adhesive. The cornice is light: it will not fall off! (See Pic 12)

All in-line butt joints and mitres must have glue between the two joined sections. This forms an expansion joint.

Tip: The following adhesives should not be used: Silicone & contact adhesive. Rhinobed is often used; although cheaper, more is used – a false economy. NMC Adefix P5 is flexible and designed for the job! Installations using NMC cornice and glue carry an international guarantee.

Tip: Leaving the glue slightly thicker to the outside of the glue bed minimizes the amount of filling required.

Tip: In hot or dry conditions, the glue thickens, and the quality of adhesion is at risk. Sprinkle a little water on the glue and mix to keep glue at its optimum constitution / viscosity.



Pic 12



Pic 13

4.6 Paste Onto Wall

Place the base of the cornice onto the chalk-line and press gently with splayed fingers. (See Pic 13)

Although the cornice is very dense, pressing too hard can damage it. Tip: If the last piece in a closed loop (i.e. room) cannot easily fit into position, try pushing it in from the bottom, and twisting it up and outwards once in position.

4.7 Filling & Cleaning

Any gaps between wall and cornice must be filled with NMC Adhesive/ Filler and squared off with a scraper. A damp sponge is then used to clean the wall and the cornice. The installation assistant best does this.

Tip: Run the blade of the scraper against the wall, and not the base of the cornice. If the scraper slips, it cannot cut into the cornice. (See Pic 14 & 15)



Pic 14 - WRONG! Scraper will damage cornice



Pic 15 - Run scraper along the wall

4.8 Aligning & Pinning

Once a section is complete, ensure that cornice lengths are lined up. If a length of cornice does not remain perfectly in position, pin it with panel pins (Pic 16). In severe instances, a concrete nail through the cornice will pin it in position until adhesive has set (24 Hours) (Pic 17)



Pic 16



Pic 17

Correcting alignment whilst the job is still wet can save a lot of sanding time! (An ounce of prevention is worth a pound of cure). **It is very simple to adjust cornices while still wet: Dry cornices need replacing!**

If one piece of cornice stands out higher than the other, use a small wedge to bring the lower piece out a little. Cut a wedge from scraps, and insert under cornice. Push the wedge deeper until the cornice lengths are flush with each other, and then cut off with a utility knife.

On long walls, climb the ladder and run your eye down the length of the completed wall. Any undulations in the cornice line will be visible.

If you can see that something is wrong, but cannot pinpoint the cause, use a builder's straight edge (2,5m) to test the wall, ceiling, and cornice base line. (This is the best way to establish the location and severity of ceiling "bumps")

It is good practice to never install a piece of cornice shorter than 400mm on a straight wall. This helps accurate alignment.

4.9 Sanding

Allow at least 12 hours to dry. Sand the joints lightly with 100-grit floor sanding paper. Using a small amount of glue, “smudge” across the joint to mask it using a finger or a sponge.

Tip: Lightly dab a wet sponge on the glue smudge. Note: This glue must be a very thin layer to avoid *highlighting* the joint instead of masking it.

Tip: In the event of a cornice piece having moved out of position during drying, NMC cornices (due to its closed cell technology) can be “re-profiled” using sandpaper. If problem is severe, cut out a section of approximately 600mm, and bridge the offending joint.

For perfect results, a second sanding with fine water paper is recommended. Once painted, a well-finished joint will be invisible.

Tip: Be careful when sanding joints. Polystyrene is softer than dry adhesive; Avoid making “valleys” to the left and right of the joint, whilst the joint is a “hill”.

4.10 Painting

PVA paint is recommended. The general rule of thumb is: Whatever paint goes onto the ceiling goes onto the cornice.

Matt finishes hide joints better than sheen finishes.

Tip: Paint technique on cornices can look very impressive

5. ADVANCED APPLICATIONS / USEFUL TECHNIQUES:

5.1 Angles Other Than 45 Degrees – Obtuse [Shallow]

This will require the Vario Mitre Box (Swinging arm) – As shown in all the illustrations.

Any angle can be corniced neatly applying the basic rule: The angle must be bisected. I.e. divided into two equal parts.

Step 1: Cut the cornice piece to size (square cut for starters) (See Pic 18)

Step 2: Place a piece of cornice from one direction, and pencil-mark the ceiling. (See Pic 19)

Step 3: Place the next piece from the other direction, and mark again. Where the two lines intersect, transfer the mark onto the cornice (ceiling side, and against wall). (See Pic 20 & 21)

Step 4: Place in the mitre box and adjust the “swinging arm”. Sight along the two marks, and make the cut. (This should be on, or very close to the 22,5 Degree “click” of the mitre arm.) (See Pic 22 & 23)



Pic 18



Pic 19



Pic 20



Pic 21



Pic 22



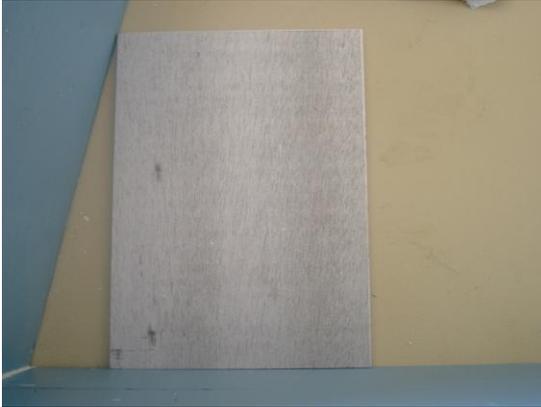
Pic 23

This marking technique can be used in any application where the exact angle required is unknown. If the mitre box arm cannot adjust far enough, try lowering the cornice from the fence. This will move the mark closer within range of the saw.

Tip: Due to inaccuracy in "sighting" the two marks, the cornice cuts may need to be adjusted using a Utility knife.

5.2 Angles Other Than 45 Degrees – Acute (Inside Corners)

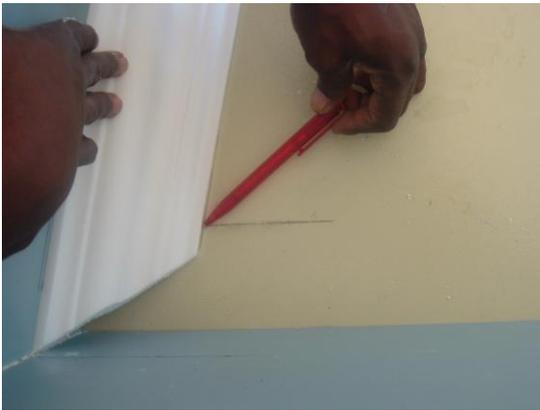
This is a very sharp angle and is generally out of the range of the mitre box. This will require a free-hand cut. Pre-cut a standard 45-degree inside corner to allow the cornice piece to fit into the section requiring marking. (See Pic 25)



Pic 24 - Note the wall is off-square – acute angle



Pic 25 – Pre-cut a 45 degree mitre, to allow access



Pic - 26 Mark both sides of the mitre



Pic 27 – Cornice is lowered in mitre box to align saw



Pic 28 - Semi free-hand cut needs manual trim



Pic 29 - Note the square plank showing acute angle

Tip: For sawing very long cuts, use the side of the mitre box as a vertical guide in a free-hand cut. This at least eliminates one variable. Note: Acute angles take a bit of practice, but test-run on a small piece that can be cheaply discarded.

5.3 Angles Other Than 45 Degrees – Acute (Outside Corners)

Acute outside corners are the reciprocal of the inside corner as described in 5.2 above. Follow the exact procedure:

- Bisect the angles
- Mark ceiling where cornices intersect
- Mark cornices where pencil lines intersect
- Cut. (Final trimming is usually required)

5.4 Curved Walls

With a little patience, curved walls can be very rewarding. Once experienced, budget on an installation rate of one hour per meter for a medium size cornice. This work is slow and painstaking.



Pic 30



Pic 31

Tip: Do not try and bend the cornice around the curve. If you can achieve this, you will be the first! Dado style cornices that lie flat on the wall (E.g. NMC “N”, “O”, “I”, “M1”, “M2”) do bend to a greater or lesser degree.

Step 1: Chalk lines cannot be used on curved surfaces. Using a piece of flexible material (e.g. masonite), nail or screw it to the wall to form an even line. The base of the cornice will rest against this with good results. (See Pic 32)

Tip: Unless there is no way to affix your base guide, do not try and use a pencil line only. Even if the pencil line is straight, the bottom line once corniced is very prone to being “wobbly”!



Pic 32 - Nailed piece of masonite as base guide

Step 2: Establish the size of the facet. Taking an off-cut, place it against the curve (inner or outer), and mark off where the cornice no longer touches on both sides (i.e. Outside curve: Where gaps begin, Inside cornice, where there is no gap in the middle). Measure this piece. All the other pieces will be the same length unless the curve diameter varies along the curve. (Pic 33)

Tip: Joins will almost always be slightly visible even after work is complete: Ensure that each facet is identical in shape and size.



Pic 33 Establish size of facet piece



Pic 34 Set angle of mitre box - off by 3 to 5 deg.

Step 3: Cut the first piece dealing with the initial mitre. Cut the first few pieces tapering inwards or outwards by 3 to 5 degrees.

Tip: No matter what the radius of a curve, the angle of the cut never varies. The only variable is the size of the facet.

Step 4: Placing the base of the cornice piece on the guide, trim the side until the gap is 1 mm or less. Apply adhesive between all joins and glue. Keep the work clean.

Step 5: Sanding: If possible, allow extra drying time. (E.g. 2 days). Sand and “smudge” as per normal.

Tip: If pinning is necessary, the cutting is probably not accurate enough. The only time pinning is required is if there is a bump in the ceiling.

Each installer eventually develops his/her own curve technique. The above are some useful introductory guidelines.



Pic 35



Pic 36

Comment on Pic 35: The facet size was not consistent towards the end (RHS), but the result was good. Lots of pencil markings indicate indecisiveness about method.

Comment on Pic 36: Segments joint together well, but facet size is too large, and nail use was unnecessary.

5.5 Terminating Against a Profile (Eg. Wooden Capping or Cornice Profile)

To merge a cornice into any profile, hand carving is required. Sticking to the chalk line, mark off and cut out profile by hand. (Pic 38 & 39)

Tip: Work from the most difficult section outward. Don't leave the difficult part for last; the piece can be cut to length once the profile has been finalized.

Tip: A helpful start is to cut a mitre to give the *general shape* to the work at hand (See Pic 37)



Pic 37 - Start with mitre for general shape



Pic 38 - Hand carve the shape required

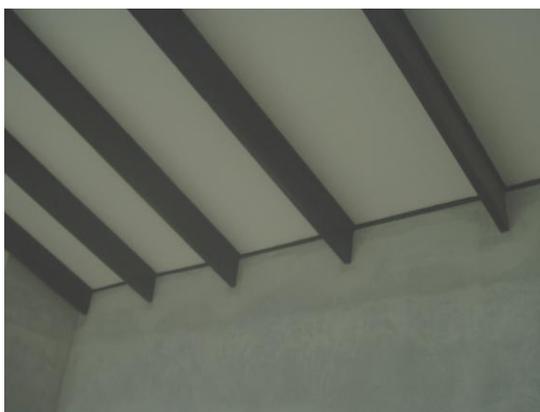


Pic 39 - Glue into position

5.6 Exposed Roof Trusses

The ceiling boards between roof trusses are often not identical in height. Trusses are also not always in a straight line.

Method: Make chalk line slightly below the trusses, and measuring from the bottom up, place each piece of cornice at the same height. The aim is to make the cornices look like one continuous line, interrupted by the trusses.



Pic 40 - Exposed Roof Trusses

5.7 Raked Ceilings

It is not possible to use a standard gauge to mark a chalk-line on a raked ceiling. The rule of thumb is: The cornice will be placed at 75% (three quarters) of its original drop. (This is a general rule only. For very sharply raked ceilings this may be even less e.g. 60% of the original drop and very gentle gradients will be around 90% of the drop.)

There is no doubt a geometrically correct way of broaching this subject. The following is a simple, fool proof method of getting the job done!

Step 1: Cut away the top and bottom glue bed section of two scraps. (See Pic 41)

Step 2: Reset the mitre box to 75% of the cornice's height. SM (As per the illustration) = 105mm now re-sets to 79mm. (See Pic 42)

Step 3: Cut a Left and then a Right Inside mitre. (See Pic 43)

Step 4: Placing these in a corner so that the mitre is neatly closed, mark off the base line. This can be repeated around the room, and then chalk-lines can be sprung. **i.e. The point at which the mitre is neatly closed is your mark – the closest you will get to a gauge.** (See Pic 44 & 45)

Even though two of the room's walls have their ceilings square, (i.e. the "side" walls), the adjusted angle provided by the mitred pieces must be followed throughout.



Pic 41- Step 1: Cut away glue beds



Pic 42 Step 2: Reset mitre box at 75% of height



Pic 43 - Step 3: Join mitre to find base line



Pic 44 - Line height differs on rake and square section



Pic 45 - Note differing line height to Pic 44 above

Tip: On the two raked walls, both glue beds will have to be cut away. On the square walls, only the top glue bed need be cut away.

Tip: For large scale jobs, glue the two mitrered scraps together using a hot-melt glue gun, and use repeatedly as a gauge.

Comment: Although the mitre box is set at 79mm, neither of the two chalk lines are at this height. A mystery, but the system works nevertheless!

5.8 Reverse Mitres

Reverse mitres are a useful way of terminating a cornice section that for whatever reason cannot form part of a closed loop.

Step 1: Place a straight cut piece in the mitre box and starting against the very edge, cut an outside corner (See Pic 46)

Tip: There will probably be scraps of these around, as each inside corner automatically generates one of these reverse mitre fillers.

Step 2. Cutting the reciprocal outside corner angle, place these together. (See Pic 47)

Examples of where reverse mitres can be used:

- Against windows that reach to the ceiling
- Where one ceiling is at a different level to others (U-shaped corncing)
- Against the diagonal of a staircase
- Where an air conditioner or vent is too close to the ceiling to allow cornice to go over the top.



Pic 46



Pic 47



Pic 48 - Reverse Mitre application

5.9 Off-Square Reverse Mitre

Where a wall ends, but is not square to the end, the off-square reverse mitre is required.



Pic 49 – Standard reverse mitre – Not recommended Pic 50 Upside down reverse mitre – Not recommended

Step 1: Place a square-cut off-cut against the terminating wall and measure the distance from the wall. Applying this same measurement to the bottom will give a fairly accurate mark for cutting. (Pic 51)

Step 2: Cut an outside corner and trim until flush with the wall. (Pic 52)

Step 3: Place the “long” piece along the wall. Mark the ceiling along the top of the cornice. (Pic 53)

Step 4: Where pencil lines intersect, mark cornices, mitre, trim and join. (Pic 53, then 52 for mark, then 54)



Pic 51



Pic 52



Pic 53



Pic 54



Pic 55 - A pelmet application of the same principle

5.10 Step-Up / Step-Down

As a general rule, cornices are not placed vertically. Sometimes however it is necessary to step up or down.

When cutting the step-up or down, the cut on the cornice along the horizontal ceiling is **upside down** – i.e. the cornice must be placed in the mitre box the other way around. For the vertical or diagonal section, the ceiling and wall are reversed, and resumes once the surface is level again.

Step up = outside corner Step down = inside corner



Pic 56 & 57: Cornice is Upside down in mitre box, but correct on wall.

5.11 3-WAY MITRE

Where a vertical cornice is merged into an otherwise closed [cornice] loop.

3-Way mitres can only be done using symmetrical cornices (i.e. it does not matter which way around the cornice goes – top and bottom are the same.) These include Nomastyl A, A1, A2, A3, ST2, ST3)



Pic 58



Pic 59



Pic 60



Pic 61

Step 1: Mark off the mid-point (horizontal) of the cornice. (As shown in Pic 59)

Step 2: Cut the inside corner as usual. (See Pic 58)

Step 3: Turn the cornice over, i.e. upside down in the mitre box, then, aligning the saw with the mid-point line from step 1 above, cut off the bottom half of the mitre. (See Pic 60)

Step 4: Steps 1 to 3 will need to be repeated 3 times; i.e. you need 3 pieces as shown in Pic 60.

This will all merge into a 3 way mitre. (See Pic 61)

6. OBSTACLES AND SITE PROBLEMS (TIPS)

6.1 Air Vents / Air Conditioning Outlet Ducts

Cornice can be notched provided that the notch does not take up more than a third of the cornice drop.

Tip: Hold the cornice at 45 degrees when notching (i.e. as it would seat in the mitre box) otherwise the angle of the notch will be incorrect.

Use a guide such as a “straight edge” or ruler to get the most accurate cut. It is useful to have somebody hold the guide whilst cutting.



Pic 63 - Notch Over Aircon Duct

Where an air conditioner or other obstacle has been placed too close to the ceiling to allow the cornice above it, simply place a reverse mitre as close as possible to each side of the unit. This also works for blinds, and curtain rods.

6.2 Bowed Ceilings & Ceiling Bumps



Pic 64 - On either side of a bump is a bow. Always keep base line straight.

Bows:

Always keep the bottom line straight. Generally, the cornice and ceiling will be painted the same colour, and often the wall is a different shade. "Filler" is not nearly as noticeable as a cornice line that is "off".

Tip: Do not try to fill a severely bowed section while still wet. The weight of the adhesive will push the cornice forward out of place. Fill once the cornice has set.

The most effective remedy for a bowed ceiling is:

- Correct the ceiling (lower bowed section from inside the ceiling)
- Skim the bowed section after the cornice has been installed. Caution: The edge of a trowel can cut the cornice. Be careful.
- The published maximum gap for filler is 6mm. Using "struts" (square blocks) cut from cornice off-cuts, this figure can be substantially exceeded.

Bumps:

Step 1: Check if the bump cannot be corrected by nailing the ceiling board back into position. In the case of a concrete slab, chisel away some of the bump

Step 2: If correction of the problem is not possible, trim away some of the glue-bed section of the cornice without affecting the face, and apply adhesive.

Step 3: Paste onto the wall, keeping the base of the cornice on the chalk line.

Step 4: Where the bump is at its lowest point, nail the cornice to the wall. This keeps the cornice base true to the chalk line. (In severe cases, several nails)

Step 5: Climb a ladder and cast your eye down the line ensuring that the cornice runs true to the chalk line.

6.3 Ceiling Cover Strips

When corning over ceiling cover strips, do NOT try and cut the cover strips. For half-round cover strips: Take a dowel stick about the same diameter as the cover strip. Wrap a piece of 100 grit sandpaper around the dowel. Sand a "groove" into the cornice at the correct interval. For square cover strips, simply notch the cornice with a utility knife.



Pic 59 - Notch over cover strip

6.4 Ceiling Out of Level

This requires forward planning. Start where **ceiling** is at its lowest point. Try and average out the problem as far as possible. Be very aware of where the cornice will be joining with the balance of the level area. When cutting mitres, place cornices in the mitre box **AS THEY WILL BE FINALLY INSTALLED**. (EG If the depth of the cornice should be 100mm, and the ceiling dips by 25mm, place the cornice in the mitre box at 75mm and cut. (Mark off the mitre in pencil on the ceiling and make a "custom" mitre.)

Tip: Where ceilings push down trim away part of the glue bed, but without cutting any of the cornice face. This will help the cornice lie square against the ceiling.

Where the eye draws lines, (E.g. a sliding door frame lines up with the ceiling.) It is sometimes necessary to install slightly out of level in the interests of achieving parallel lines. When this is required, measure up from the "reference point" rather than down from the ceiling. **STRAIGHT IS WHAT LOOKS STRAIGHT!**



Pic 60 A ceiling out of level;
Installer left difficult part for last and could not meet up!
Start with the difficult part.

6.5 Existing Cove Cornices (Overlay NMC)

A distinct advantage of NMC is its ability to overlay without removing the existing cove cornicing.

Where coving is very loose, these sections should be removed.

Cornice "GR" (85mm x 80mm) and larger - i.e. AT, SM, A, Ti, TL - can overlay

Other useful overlays include alarm wiring, surround sound wiring, plumbing pipes, and air-conditioning pipes.



Pic 61 – Overlay over existing cove cornice

7. EXTERIOR APPLICATIONS

NMC Nomastyl is not designed for exterior use, but customers sometimes insist.

Customers must understand that there is no NMC guarantee with exterior applications. The correct product, guaranteed for exterior application is NMC Domostyl.

The problem with exterior application is the severe fluctuation in temperature causing the cornice to expand and contract, leaving cracks.

Note: Semi-Exterior applications such as under-roof patio's, and under eaves are generally fine. The key is to keep polystyrene away from rain and direct sun.

When applying Nomastyl in an exterior application, remember the following:

- Cornice must be sealed along its length with silicone to stop moisture penetration and eventually failure of the adhesive.
- Joins between lengths must be filled with silicone to allow for extreme expansions. (A larger gap of 3 to 5mm is useful)

Note: Work carefully with the silicone since it cannot be cleaned off with a solvent.



Pic 62 - Patio Application – Away from weather



Pic 63 - As part of a corbel – a VERY bad idea!

8. INSTALLING ONTO FANCY SURFACES

Examples:

- Paint Techniqued walls
- Wallpaper
- Cementitious Coatings (Cemcrete, Crestone, etc.)
- Face or Klinker Brick (Baked Clay Brick)
- Scratch Plastered Walls
- Quarry tiles / Sandstone

Common sense dictates that in any “fancy” finish will need to be preserved. Since water is used in the cleaning of the adhesive, check that water will not damage the surface.

NMC adhesive, once absorbed into a porous surface such as a face brick is virtually impossible to clean. Some useful hints include:

- Use a nail brush to scrub out glue while still wet
- Masking tape to mask off delicate area
- Use very little adhesive on the base glue bed
- Avoid “filling” the bottom gap
- Test theories on a small inconspicuous section.
- For very rough surfaces, get the builder to make a plaster band at the correct height (E.G. mortar-less sandstone designs)

9. DÉCOR APPLICATIONS

NMC can be creatively used in many décor applications. The most common are:

9.1 Pelmets

Curtains rails can be hidden behind a corniced pelmet to create a beautiful finish.

It is advisable to install a wooden backing behind the cornice. Typically, the wooden backing would be the same depth as the cornice.

Brackets can be placed “inwards” as they will be covered by the cornice. This will leave the back looking neat and un-cluttered.



Pic 64 – Pelmet brackets to the inside



Pic 65 - Mock-up of pelmet



Pic 66



Pic 67

7.2 Lighting Troughs

Lighting troughs are popular in T.V. lounges, dining rooms etc. where low lighting is required.

There are 2 types of lighting trough:

7.2.1 Double cornice

A complimentary smaller profile is used to cast light up over a larger profile.



Pic 68



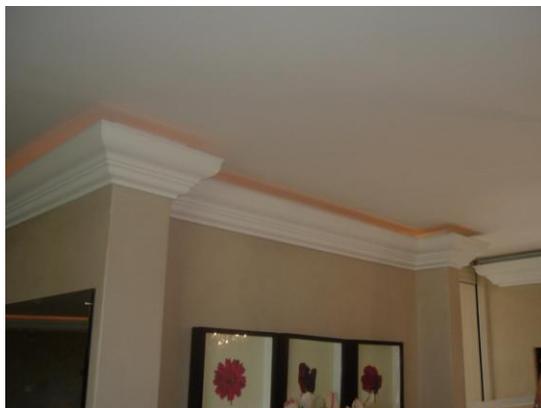
Pic 69 – Silicone based rope light (Snake light)

Good Lighting Trough combinations include:

- TL with K as trough
- ST3 with ST2 as trough
- SM with F as trough
- AT with H as trough

Tip: Glow from rope-light penetrates through polystyrene, it is important to pre-paint the inside of the cornice before installation. Black paint is best.

7.2.2 Lowered Primary Cornice:



Pic 70

Tip: Lowering the cornice is not particularly practical, as it is difficult to dust these deep troughs.

7.3 Boxes / Bulkheads

Ceiling features for purposes of down-lighting or to “break” a large ceiling area can be enhanced by using NMC cornices. (See Pic 71)



Pic 71 Various examples of bulkheads



Pic 72 Perimeter box example with down-lighters

7.4 Doubled Up Cornice – For Size

Where a very large cornice is required (Eg. In a commercial application), profiles can be doubled up.



Pic 7 - Step 1: Make a supporting box



Pic 74 Step 2: Place first cornice on box (A)



Pic 75 - Step 3: Place second cornice on box (TL)



Pic 76 - Real life example in coffee shop

8. TROUBLESHOOTING



Pic 77 – Mitre does not close neatly



Pic 78 – Mitre does not meet at corner



Pic 79 – Mitre cuts equal in length but do not touch



Pic 80 - Mitre cuts different lengths

Installation Problems	Cause	Solution	Pic Ref
Mitre open on top	Mitre fence set too low, or gauge inaccurate	Check mitre box and gauge settings	Pic 77
Mitre open at bottom	Mitre fence set too high, or gauge inaccurate	Check mitre box and gauge settings	Opp. Of Pic 77
Bowed Cuts	Wrist Action: Saw is being bent during cutting (Common when cutting TL – A long cut)	Relax hand and keep saw straight	Pic 79
Mitre cuts are different lengths	Inaccurate mitre box . OR Wrist action: Scope for angle variation is high.	Get someone else to test mitre box. Practice and adjust wrist action.	Pic 80
Mitres not meeting in the corner	One piece cornice being forced into corner (too tight), therefore mitre does not bisect at the wall's corner	Check which cornice length is too long, and shorten	Pic 78

Problems With Finished Work	Causes	Solution
Cracking joins	<ul style="list-style-type: none"> - Settling of new building - Temperature fluctuation (Aircon, sun etc) - Insufficient glue between butt joins or glue was dry - Exposure to weather 	Eliminate causes where possible. Fix: Fill with watered down glue. Last resort: Re-install.
Parting on ceiling. (Where possible, remove a piece of cornice to see where problem lies: glue to ceiling, glue to cornice.)	<ul style="list-style-type: none"> - Loose ceiling boards - Wind sucking ceiling - Use of dry adhesive - Unsealed rhinolight on ceiling. (Surface Prep) 	Resolve cause and patch or re-install pieces.
Parting on wall	Use of dry adhesive Sandy plaster / dirty wall Settling: Look for wall or plaster cracks If drywall: Check surface prep and check for movement on wall.	Sort out cause and re-install pieces. (If removed carefully, pieces can generally be re-used)

Appendix 1: Glue Spread Rates

Glue spread rates vary due to filling requirements and general surface. Below are some typical usages:

Size Category	Examples	Spread Rates
35mm to 50mm (Very Small)	E, F, B2, H, A3, A2	60 – 70m per 5kg bucket
50mm to 85mm (Medium Small)	K, A1, GR, (AT)	50 – 55m per 5kg bucket
100mm to 110mm (Medium)	AT, SM, A	40- 42m per 5kg bucket
135mm to 155mm (Large)	Ti, TL	32 – 35m per 5 kg bucket