ARCHITECTURAL BRIEF – NEED STATEMENT

for
WALL & PARTITION and ALL MORTAR FINISHES
and
Specifications and Method Statements for Internal and External Wall Finishes of Specified Application Thicknesses

CONTENTS

Note

This is to acknowledge that the following **'Need Statement'** over-rides ALL PREVIOUS

a) Bills of Quantities
b) Method Statements and Product Requirements

issued by us earlier.

CONTRACT DEPARTMENT

SECTION 1

Schedule Of Accommodations

The **Architectural Brief-Need Statement** serves strictly and functionally as our firm guidelines in terms of the minimum standard requirements and expected application methods for architectural works for the internal and external finishing works on site as required by us.

The Architectural Drawings if provided are meant to serve as guides for the selected sub-contractor to develop a complete and proper architectural and structural working drawings and detailed drawings. The contractor is allowed to improve on the drawings with written permission from the Project Manager (PM) and may submit their improvement in the proposal in accordance to their best professional judgment and fulfilling the requirements in this statement.

It is the responsibility of the sub-contractor to allow their costing based on acceptable tolerances upon their professional judgment of the required finishing works associated with the selected substrates under normal circumstances.

SECTION 2

Architectural Guild lines

General

The overall planning and method of application shall reflect the functionality as a whole. The design of the units is based on IBS system, with **preference** given to the usage of **IBS System and selected 100% locally made and proven materials for IBS System**. Prior consent must be obtained in the form of a written approval from **..... Sdn Bhd** if an exemption on the **Need Statement** is needed.

The building construction systems to be used shall be suitable in terms of its ability to incorporate **100% locally made and proven materials for IBS System** and architectural design features to minimize labour. Wherever possible the sub-contractor should utilize local labour. The sub-contractor is preferred to adopt the latest construction method/technique such as Industrial Building Systems. **All premix plaster, thin plaster and skim coating works shall be preferred to be mechanically sprayed applied.**

Project Manager shall approve samples of all architectural finishes and accessories before supply and installation.

SECTION 3

3.1 Wall and Partitions

Walls and partitions shall conform to the complete IBS System of **RC shear wall in composition with infill brick-wall or block-wall** manually applied with Cement-Based Polymer Modified Premix Skim Coat, Thin Plaster and Render or Additive Modified Mortar.

3.2 All Mortar Finishes

Internal finishes shall be **100% locally made and proven with track records cement-based polymer modified factory premix and pre-pack dry mix system consisting of**

- **3-5mm** thick **POLYMiX Skim Coat System** onto all ceiling soffit areas and plastered surfaces.
- Strictly **6-8mm** thick **POLYMiX Thin Plaster System** on all RC wall and block-wall surfaces.
- **20mm** overall thick **PMA Modified Plaster or POLYMiX Thick Render Plaster System** for all internal brick-wall surfaces (inclusive of **3-5mm thick skim coating as above**).
- **13mm** thick **POLYMiX Thin Render Premium System** on all external RC wall surfaces **and**
- **20mm** overall thick **PMA Modified Plaster or POLYMiX Thick Render Plaster System** for all external brick-wall and block-wall surfaces.

3.3 Preferred Quality Assessment Systems

Proven CONQUAS - Seventh Edition 2008 by Building and Construction Authority (BCA) or QLASSIC – CIS7:2008 by Construction Industry Development Board (CIDB) manual-applied method consisting of all necessary surface preparation that includes making good the surfaces with similar premix products to acceptable tolerance, installation of level strips & angle liners, prewetting of surface if required and the usage of only specified cement-based polymer modified premix materials as defined in above and in strict accordance to the manufacturer instructions as in the **Specifications & Method Statements**.

SECTION 4

4.1 Specifications and Method Statements for Internal and External Wall Finishes of Various Application Thickness

4.1.1 Introduction

The hydration process which is necessary for the development of both bonding and compressive strengths depend on time and water for all cement based products. Due to the high ratio of surface area over volume compared to thick traditional cement sand plaster, water is lost rapidly through evaporation and absorption by the substrate, more so in cases of hot conditions and substrates, resulting in possible powderiness and poor bonding as only part of the OPC is hydrated only. Therefore, skim coat, thin plaster and render must possess water retaining agent for better water retentivity, retardation of OPC to slow down hydration and polymers for better workability, bonding, compressive & cohesion strength and durability.

Job-site mixed mortar was not, and is not, able to meet all these requirements adequately. As a result, the development of the Modern Construction and Building Chemicals Industries from the 1960's onwards was influenced mainly by two important trends, which are seen throughout the whole world today:

- The replacement of the job-site mixed mortars by premixed mortars by premixed and prepacked dry-mixed mortars, which are further increasing applied by machine. The enormous increase in productivity due to this modern application system allows manpower savings about 30% compared to traditional manual system.
- The modification of mortars with polymeric binders to further improve the product quality and to meet the requirements of the modern building industry. Consequently the usage of premixed prepacked dry-mix mortars not only significantly increase the production & conveyance performance and the productivity in construction sites but also eliminates on-site mixing errors normally associated with over-dosing of lime or sand resulting in poor quality finishing.

Premixed mortars in short, ensures that consistently high quality binders, washed & graded sand/aggregates, and additives are mixed in exactly the same ratio, thus ensuring high quality mortars always. In addition, dry mix mortars can also be tailored in production facilities to precisely conform to certain types of construction and material specifications.

4.1.2 General Specifications for Skim Coat, Thin Plaster & Render and PMA Additive System

The Skim Coat & Render products and its application method shall be in line with the implementation of the Quality Assessment System and the approved products shall be strictly conforming to **locally made (Buatan Malaysia, Milik Tempatan), Green Label Accreditation and proven materials with track records** only and registered against the provisions of **ISO 9001:2000** International Standard for Quality Management System with **at least 3 years of good track records & references in good profile projects with similar Quality Assessment System.**

The Skim Coat, Thin Plaster & Render products shall be strictly **POLYMiX Skim Coat, Thin Plaster & Render System (www.polymix.com.my**) manufactured by **Corporate Excelsior (M) Sdn Bhd** and obtainable at **603 – 7880 2666.**

4.2 Surface Preparation

4.2.1 RC Ceiling Soffit and Shear Wall Surfaces

Concrete surface requires skim coat to cover up unevenness caused by bulging & depression of concrete, pinholes, honeycombs, form-joints and inaccurate alignment of wall. Due to the thin application of skim coat and thin plaster, the rapid loss of water into the substrate and evaporation has to be adequately compensated by the water retentivity of the skim coat and thin plaster materials.

The surfaces have to be cleaned to reasonably smooth and free from dirt, loose particles, oil and grease. Hardened mortar or cement slurry dropping have to be removed by scrapping away. All structural cracks, depression, bad honeycombs and unevenness (≥ 3mm for internal and ≥ 5mm for external shall be remedied by patching with similar **POLYMiX Thin Render Premium** to effectively profile to acceptable flatness to receive skim coat with good bonding to the original substrate. The acceptable profile should be governed by continuously checking while patching with 5/6 feet aluminium float to ensure compliance to tolerance.

Representative from the skim coat application company must check to receive all surfaces within 5mm tolerance and clearly mark with colour marker all isolated areas out of tolerance and to be certified true by Main Contractor in a Defect-List format. Main Contractor will then instruct the responsible party to repair the defects or issue a variation order to the skim coat application company to perform the same task.

Hack out the bulging (defective) concrete where necessary and patch back/make good the hacked-off portion inclusive of all "depressed" concrete surfaces. Excessive formwork joints shall be grinded flat and smooth enough to receive continuous skim coat application so that joint marks are not visible to the naked eye. Pre-wet wherever necessary all wall surfaces to reduce water loss through absorption. All corners shall compulsorily be preformed with PVC angle liners than manually shaped. All interfaces between RC substrate and clay-brick wall shall be compulsorily lined with self-adhesive fiber-tape/mesh and shall eventually be embedded within the thickness of the skim coat and thin plaster materials. If tolerances are way off upon internal and external angle checking with "*siku of 90 degree*", then a plumb to install level pegs at those areas are highly recommended.

M&E conduit lines are patched back preferably with **POLYMiX Basic Render** to minimize shrinkage.

The RC Shear Wall surfaces must then be jointly inspected to meet the acceptable tolerances and approved to be handed over for skim coating and thin plastering works before actual commencement of the manual application.

Prewetting the concrete surface prior to skim coat and thin plaster application is a good practice.

4.2.2 Infill Brick-wall Surfaces

Brickwall requires thick premix render or PMA modified mortar to cover up joint areas (10-20mm) and surface unevenness caused by inconsistent jointing with cement sand mortar, protruding mortar at joint gaps and inaccurate dimensions of brick wall. The premix thick render should retain its workability during the spreading of the base coat by manual application method as each compression motion caused by trowelling is squeezing the water necessary for proper hydration out. The loss of water in this manner is practically eliminated by the spray method, as the wet texture is not disturbed before the trimming process at all.

The surfaces to be constantly checked for alignment and verticality and shall be free from dirt, loose particles, oil and grease. Remove all loose materials or traces of foreign materials too. All joints to be filled fully and excess cement sand mortar should be scrapped away during brick installation. All hardened mortar or cement slurry droppings is to be removed by scrapping away prior to the application of plaster. All structural cracks and unevenness (≥10mm for Clay Bricks) shall be remedied by patching to reasonable flatness with **POLYMiX PMA Plaster/POLYMiX Render** to effectively profile to acceptable flatness to receive skim coat with good bonding to the original substrate. The eventual bond strength to the substrate shall be at least 0.4N/m2 for the patching materials. The acceptable profile should be governed by continuously checking while patching with 5/6 feet aluminium float to ensure compliance to tolerance. The eventual bond strength to the substrate shall be at least 0.4N/m2 for the patching materials. *If application is by spray method of 2 layers, the patching up is not necessary if the unevenness is not excessive, subject to spray applicator point of view with the consent of the main contractor.*

When some odd bricks are protruding out of the wall surface, they can be possibly chiseled off back to alignment. M&E conduit lines are patched back (preferably with **POLYMiX Render** to minimize shrinkage) and all installation of fiber-tape/mesh reinforcement required (onto interface between two difference substrate), lean mortar (1:6) infill (to horizontal and vertical lines) and angle liners (compulsorily to all required corners) are to be completed prior to the thick plaster application.

Prewetting the surface prior to thin/thick plaster application is a good practice.

4.2.3 Infill Block-wall Surfaces

Blockkwall requires skim coat to cover up joint areas and surface unevenness caused by inconsistent jointing with thin bed adhesive, protruding mortar at joint gaps and inaccurate dimensions of block wall. The skim coat should retain its workability during the spreading of the base coat by manual application method as each compression motion caused by trowelling is squeezing the water necessary for proper hydration out.

The surfaces to be constantly checked for alignment and verticality and shall be free from dirt, loose particles, oil and grease. Remove all loose materials or traces of foreign materials too. All joints to be filled fully and excess thin bed adhesive should be scrapped away during block installation. All hardened mortar or cement slurry droppings is to be removed by scrapping away prior to the application of thin plaster. All structural cracks and unevenness (≥5mm) shall be remedied by patching to reasonable flatness with **POLYMiX Render SP** to effectively profile to acceptable flatness to receive skim coat with good bonding to original substrate. The acceptable profile should be governed by continuously checking while patching with a 5/6 feet aluminium float to ensure compliance to tolerance.

The eventual bond strength to the substrate shall be at least 0.4N/m2 for the patching materials. *If application is by spray method of 2 layers, the patching up is not necessary if the unevenness is not excessive, subject to spray applicator point of view with the consent of the main contractor.*

Representative from the skim coat application company must check to receive all surfaces within 5mm tolerance and clearly mark with colour marker all isolated areas out of tolerance and to be certified true by Main Contractor in a Defect-List format. Main Contractor will then instruct the responsible party to repair the defects or issue a variation order to the skim coat application company to perform the same task.

When some odd blocks are protruding out of the wall surface, they can be possibly chiseled off back to alignment. M&E conduit lines are patched back (preferably with **POLYMiX Render SP** to minimize shrinkage) and all installation of fiber-tape/mesh reinforcement required (onto interface between two difference substrate), lean mortar (1:6) infill (to horizontal and vertical lines) and angle liners (compulsorily to all required corners) are to be completed prior to the thin plaster application. If tolerances are way off upon internal and external angle checking with "*siku of 90 degree*", then a plumb to install level pegs at those areas are highly recommended.

Prewetting the surface prior to thin/thick plaster application is a good practice.

4.3 Mixing Process

The following mixing ratio is to be strictly adhered to and be performed only by mechanical hand-held mixer drill with clean water for 3-5 minutes until a creamy consistency is achieved. Mixing manually by hand is strictly prohibited. Remix for 1 minute before use if material is left undisturbed for more than 30 minutes.

If application is by spray method, the mixing should preferably be continuous and stored in a large container as a supply reservoir to feed the spray pump to minimize any interruption to the spray application. Alternatively, the mixing could be performed by mechanical continuous mixers, obtainable from equipment suppliers.

Mixing or diluting with OPC/white cement/ lime/other brand is strictly prohibited.

4.3.1.1 POLYMiX Skim Coat System for 3-5mm Thick Application Internally

Base Coat: 40 kg bag of Fine **Mortar Base** to 11.0 to 12.0 liters of clean water.
Finish Coat: 25 kg bag of **Plaster Finish** to 10.0 to 10.5 liters of clean water.

Recommended colour: Grey for wall only and Grey / White for ceiling.

4.3.1.2 POLYMiX Smoothening System for 2mm Thick Application Internally

Smoothening Coat: 40 kg bag of Thin **Plaster Grey** o 13.0 to 14.0 liters of clean water.

Recommended colour: Grey.

4.3.2 POLYMiX Thin Plaster System for 6-8mm Thick Application Internally

Base Coat: 40 kg bag of **Coarse Mortar Base Grey** to 11.0 to 12.0 liters of clean water.
Finish Coat: 25 kg bag of **Plaster Finish Grey** to 10.0 to 10.5 liters of clean water.

Recommended colour: Grey.

4.3.3 POLYMiX Thin Render System for 13mm Thick Application Externally

Thin Render Premium shall be mixed by only high speed mechanical mixer of continuous rotating drum mixer with 7.0 to 8.0 liters of water to achieve a good trowel consistency. Alternatively, mechanical mixer shall be the type equipped with automatic water and powder delivery and mixing and pneumatically controlled from the spray nozzle end for spray application.

4.3.4.1 POLYMiX PMA Plaster System for minimum 16-20mm Thick Application Internally and Externally

The mortar for internal and external plastering shall be composed of one part OPC to maximum 4 parts of clean washed fine sand mixed with **Plaster & Mortar Additive-PMA** at dosage of 150 gram (dosage subjected to trial mix at site) sachet to 50kg of OPC, used strictly in accordance with manufacturer's instructions. Mixing is by rotating drum and for a minimum of 3-5 minutes.

4.3.4.2 POLYMiX Thick Render System for minimum 16-20mm Thick Application Internally and Externally

Basic Render or Render SP shall be mixed by only high speed mechanical mixer of continuous rotating drum mixer with 7.0 to 8.0 liters of water to achieve a good trowel consistency. Alternatively, mechanical mixer shall be the type equipped with automatic water and powder delivery and mixing and pneumatically controlled from the spray nozzle end for spray application.

4.4 Method Statements for Application

4.4.1 POLYMiX Skim Coat System 3-5 mm Thick Application Internally

Recommended Application

- Internal Concrete Ceiling Soffit.
- Internal Base Plaster Surface

4.4.1.1 Manual Application Method Only

Apply freshly mixed **POLYMiX Fine Mortar Base** to a thickness of 2 – 3mm with clean steel trowel and firmly work material to attain good contact with the substrate. Immediately trowel **POLYMiX Fine Mortar Base** to the correct flatness or alignment and allow it to gain partial surface drying and return to trowel another coat of **POLYMiX Fine Mortar Base** if necessary to achieve the desired thickness and flatness. The base coat is generally applied to a thickness of 2 – 3mm. It is then left for approximately 20 minutes for partial surface setting prior to application of finish coat. **POLYMiX Fine Mortar Base** should be best trowelled before achieving initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet.

The finishing coat is applied onto the **POLYMiX Fine Mortar Base** base coat. Generally, it is applied to a thickness of 1 – 2mm. **POLYMiX Plaster Finish** should be best smoothened with a steel trowel when the base coat has achieved initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet. Progressive checking during application to ensure required flatness and straightness of corners to within acceptable tolerance of **CONQUAS quality requirement** so that all gaps between eventual installations of fitting and skim coated surfaces will not be obviously visible. It is recommended to apply painting onto skim-coated surfaces after 28 days to ensure best bonding so that no spalling, leaks or stains will occur. All skim coat adhering to the angle liners shall be removed immediately upon completion while still wet to minimize surface scratching. No visible crack and damage should be observed from a distance of 1.5m on the completed skim coated surface.

4.4.2 POLYMiX Thin Plaster System for 6-8mm Thick Application Internally

Recommended Application

- Internal RC Surface.
- Internal Block-wall Surface.

4.4.2.1 Manual Application Method

Alignment is checked with vertical plumbing and horizontal string marking and all vertical level pegs of 6mm thickness are installed every 2-3m both directions. Excessive bulging are hack off and all isolated depression spots or patches (more than 4mm) are rectified manually by patching with **POLYMiX Render.**

Then, apply freshly mixed **POLYMiX Coarse Mortar Base Grey** to a thickness of 6mm as controlled by the level pegs with clean steel trowel and firmly work material to attain good contact with the substrate. The thickness is be best obtained by applying 2-3 layers at preferably 2-3mm/layer/building up thickness to achieve the desired bonding and flatness. Immediately trowel to work **POLYMiX Coarse Mortar Base Grey** to the correct flatness every layer and allow it to gain partial surface drying and return to trowel **POLYMiX Coarse Mortar Base Grey** to achieve the desired thickness and finishing. **POLYMiX Coarse Mortar Base Grey** should be best trowelled preferably in down up motion before achieving initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet. Progressive checking during application at this point with 5-6 feet aluminum rule ensures flatness to an initial tolerance of 3mm per 6 feet.

The finishing coat is applied onto the **POLYMiX Coarse Mortar Base Grey** base coat. Generally, it is applied to a thickness of 1-2mm. **POLYMiX Plaster Finish Grey** should be best smoothened with a steel trowel when the base coat has achieved initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet. Progressive checking during application with 5-6 feet aluminum rule to ensure flatness and straightness of corners to within tolerance of **CONQUAS quality requirement** so that all gaps between eventual installation of fittings and skim coated surfaces will not to be obviously visible. It is recommended to apply painting onto skim coated surfaces after 28 days to ensure best bonding so that no spalling, leaks or stains, will occur. All skim coat adhering to the angle liners shall be removed immediately upon completion while still wet to minimize surface scratching No visible crack and damage should be observed from a distance of 1.5m on the completed thin plastered surface. Any damage on the thin plastered wall by other trades should be rectified an according to the manufacturer recommendation progressively and systematically.

It is recommended to apply painting onto thin plastered surfaces after 28 days to ensure best bonding so that no spalling, leaks or stains will occur. No visible crack and damage should be observed from a distance of 1.5m on the completed thin plastered surface.

4.4.3 POLYMiX Thin Render Premium System for 13mm Thick Application Externally

Recommended Application

- External RC Wall Surface.

4.4.3.1 Manual Application Method

Externally, all alignment is checked with vertical plumbing with string and all vertical level pegs of 13mm thickness are installed every 2-3m both directions. Excessive bulging are hack off and all isolated depression spots or patches (more than 5mm) are rectified manually by patching with **POLYMiX Thin Render Premium** to reasonable flatness to receive application of thick plaster.

Then, apply freshly mixed **POLYMiX Thin Render Premium** to a thickness of 13mm as controlled by the level pegs with clean steel trowel and firmly work material to attain good contact with the substrate. The thickness is to be best obtained by applying 2 layers at preferably 6-7mm/layer/building up thickness to achieve the desired bonding and flatness. Immediately trowel to work **POLYMiX Thin Render Premium** to the correct flatness every layer and allow it to gain partial surface drying and return to trowel the applied **POLYMiX Thin Render Premium** to achieve the desired thickness and finishing **POLYMiX Thin Render Premium** should be best trowelled preferably in down up motion before achieving initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet. Progressive checking during application at this point with 5-6 feet aluminum rule ensures flatness to an initial tolerance of 3mm per 6 feet.

Sponging is then best done in circular motion after the leveled base plaster has achieved initial set to create the sanded texture as required.

4.4.4 POLYMiX PMA Plaster/Basic Render System or minimum 16-20mm Thick Application Internally

Recommended Application

- Internal Brick-wall Surface.

4.4.4.1 Manual Application Method-Internal

Alignment is checked with vertical plumbing and horizontal string marking and all vertical level pegs of 16-20mm thickness are installed every 1.5m single direction. Excessive protruding bricks are chiseled off and all isolated depression spots or patches (more than 5mm) are to be rectified manually by patching up with **PMA Modified Plaster or Basic Render** to receive application of thick plaster and ensure uniform curing of the materials.

Apply the freshly mixed **PMA Modified Plaster or Basic Render** with the steel trowel from bottom up motion. The movement of building-up the required thickness should be from one side to the other and from bottom up to an initial thickness of 10-12mm for the 1st layer. The wet texture shall then be left to dry after minor soft trowelling to flatten and even out the texture slightly. Subsequently the 2nd layer shall be preferably applied on the next day to maximize productivity. This method will also enhance the bonding of the material to the substrate as the wet mortar from the 1st layer is left to cure without any disturbance. The 2nd coat/layer is then applied then with the same material to preferably 2-3mm above the installed level pegs continuously to attain good contact with the cured 1st layer. Leave the wet texture alone without disturbing it to allow enough areas to be built up for the subsequent trimming operation. Trimming is done with a 6-feet aluminium float with a sharp edge and pulled from down upwards at an angle to minimize surface contact and droppings to the desired levels guided by the same level lines and angle liners. Any uneven patches should be filled back by the same materials. All excess materials being trimmed away or dropped to the ground shall be recycled back into the mixing pod. Cut ply woods of width 2-feet shall be arranged directed under areas of application to receive droppings to minimize contamination with foreign materials.

The trimmed surface shall then be trowelled in down up motion before achieving initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet-on-wet. Progressive checking with a 5 feet aluminium rule is required during application to ensure required flatness and straightness of corners to within acceptable tolerance of **CONQUAS quality requirement** so that all gaps between eventual installations of fitting and thick plastered surfaces will not be obviously visible. Repeated steel trowelling creates a smoother surface to minimize thickness of smoothening coat when the thick render surface is attaining initial set.

The smoothening coat onto the cured base plaster can be of **2 options**;

4.4.4.1.1 Option 1 for Manual Application Method Only (Wet on Dry)

Apply freshly mixed **POLYMiX Fine Mortar Base** to a thickness of 2 – 3mm with clean steel trowel and firmly work material to attain good contact with the substrate. Immediately trowel **POLYMiX Fine Mortar Base** to the correct flatness or alignment and allow it to gain partial surface drying and return to trowel another coat of **POLYMiX Fine Mortar Base** if necessary to achieve the desired thickness and flatness. The base coat is generally applied to a thickness of 2 – 3mm. It is then left for approximately 20 minutes for partial surface setting prior to application of finish coat. **POLYMiX Fine Mortar Base** should be best trowelled before achieving initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet.

The finishing coat is applied onto the **POLYMiX Fine Mortar Base** base coat. Generally, it is applied to a thickness of 1 – 2mm. **POLYMiX Plaster Finish** should be best smoothened with a steel trowel when the base coat has achieved initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet. Progressive checking during application to ensure required flatness and straightness of corners to within acceptable tolerance of **CONQUAS quality requirement** so that all gaps between eventual installations of fitting and skim coated surfaces will not be obviously visible. It is recommended to apply painting onto skim-coated surfaces after 28 days to ensure best bonding so that no spalling, leaks or stains will occur. All skim coat adhering to the angle liners shall be removed immediately upon completion while still wet to minimize surface scratching. No visible crack and damage should be observed from a distance of 1.5m on the completed skim coated surface.

OR

4.4.4.1.2 Option 2 for Manual Application Method Only (Wet on Wet)

Apply freshly mixed **POLYMiX Thin Plaster Grey** to a thickness of 1 –2mm with clean steel trowel and firmly work material to attain good contact with the substrate. Immediately trowel to the correct flatness or alignment and allow it to gain partial surface drying and return to trowel another coat of **POLYMiX Thin Plaster Grey** if necessary to achieve the desired thickness and flatness. The single product system (commonly known as 2-in-1) is generally applied to a thickness of 2 mm in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet on wet.

Progressive checking during application to ensure required flatness and straightness of corners to within acceptable tolerance of **CONQUAS quality requirement** so that all gaps between eventual installations of fitting and skim coated surfaces will not be obviously visible. It is recommended to apply painting onto skim-coated surfaces after 28 days to ensure best bonding so that no spalling, leaks or stains will occur. All skim coat adhering to the angle liners shall be removed immediately upon completion while still wet to minimize surface scratching. No visible

4.4.4.2 POLYMiX PMA Plaster/ Basic Render System for minimum 20mm Thick Application Externally

Recommended Application

- External Clay-Brick-wall or Block-wall Surfaces.

4.4.4.2.1 Manual Application Method-External

Alignment is checked with vertical plumbing and horizontal string marking and all vertical level pegs of 20mm thickness externally are installed every 2-3m both directions. Excessive protruding bricks are chiseled off to reasonable flatness to receive application of thick plaster.

Apply freshly mixed **POLYMiX PMA Modified Plaster or Basic Render** with clean water with a clean steel trowel and firmly work material to attain good contact with the substrate. Allow **POLYMiX PMA Modified Plaster or Basic Render** to gain partial surface drying and return to work on the surface until the required flatness is achieved.

The first coat for 20mm plainface shall be 14mm rough plastering and the second coat to 6mm and wood floated finish/sponge finish externally.

The building up thickness shall be trowelled in down up motion before achieving initial set in order to obtain the best bonding and minimize trowel marks and possible waviness normally happened during application wet-on-wet. Progressive checking during this operation with 5 feet aluminium rule is recommended to ensure flatness to within acceptable tolerance.

Sponging effect is best done in circular motion to create the sanded texture as required to minimize visible trowel marks under direct sunlight.

