8. INSPECTION

a. Examination : Examine the work upon which the work of this Section depends prior to the application. If surfaces cannot be put in proper condition by customary cleaning, sanding and puttying, report such defects in writing.
b. Acceptance: Failure to report defects will constitute acceptance or surfaces. Refinish the faulty work at no expense to the Employer.
c. Moisture Content : Do not paint surface while moisture content as tested by moisture meter exceeds the following:
    i. Wood surface 15%
    ii. Masonry and concrete surfaces 10%
    iii. Interior plaster and gypsum board 12%
    iv. Concrete Floors 10%
d. Lighting Level : Do not apply finishes or undertake surface preparation unless illumination characteristics are acceptable for production of first-class job.

9. PREPARATION

a. Dust: Clean floors, adjacent surfaces and surfaces to be painted before work is commenced.
b. Defects: Ensure that surfaces to be finished are clean, free from machine, tool or standing marks, dust, grease, soil or other extraneous matter and all defects or sanding marks which could be detrimental to an acceptable finish.
c. Alkaline Surface: Neutralize highly alkaline surfaces with a neutralizing wash of 4% solution of Zinc Suphate. Substitute 4% solutions of Tetrapotassium Pyrophosphate for surfaces to receive latex paints. Brush off residue before painting.
d. Mildew: Scrub mildewed surfaces with a solution of Trisodium Phosphate, bleach with a solution of 1 part Sodium Hypochlorite to 3 parts water and rinse with clear water.
e. Mask and cover surrounding surfaces, coordinate and remove ironmongery, electric plates and accessories as required to keep paint from adjacent surfaces. Mask labels and specification plates occurring on equipment to be painted. Properly mask all sprinkler heads and fire detectors wherever they occur in surfaces to be painted. Remove tape when paint is dry and clean. Do not clean hardware with solvent that will remove permanent lacquer finish.

10. APPLICATION

a. Approved Manufacturer's Instructions: Apply materials in accordance with the directions and instructions of the approved manufacturer of the materials. DO not use adulterants.
b. Workmanship: Execute the work in accordance with the recognized highest standards of workmanship of the industry and to meet requirements of the specification. Work shall be executed by approved workers specially trained and having a provincial tradesman qualification certificate of proficiency. Have an approved full time senior qualified representative at the site to direct the work.
c. Painting shall be four-coat work throughout. Priming coat shall be color toned lighter than undercoat, undercoat lighter than the first finish coat: final coat shall be approved color. Apply on additional finish coat to surfaces scheduled to receive deep, dark or accent colors called for on the Schedules and for graphics.
d. Each coat shall be inspected by the manufacturer and architect. Recoating occurs without manufacturer and architect inspection, it shall be considered as not having been done and shall be re-coated.
e. Paint shall be applied by means of brushes, except for wall and ceiling surfaces on which the paint shall be applied by lamb's wood rollers. Varnish shall be brushed.
f. Spray painting will not be permitted unless specifically approved for certain areas. If approval is granted for spraying, the equipment shall be airless type. Manufacturer and architect may at any time prohibit use of spray painting for such reasons during application as carelessness, poor masking or protective measures, drifting paint fog, disturbance to other trades or failure to obtain a dense, even, opaque finish. All motors, fans, and mechanical ventilation system equipment shall be shut off during spray painting.
g. Appearance: Apply materials evenly, uniform in thickness, color, texture and gloss under adequate illumination.
h. Finishes shall be free of defects in materials and workmanship affecting appearance and performance visible from a distance of 2m defects shall include, but not be limited to improper cleaning and preparation of surfaces, entrapped dust and dirt, alligatoring, blisters, peeling, drips, runs, uneven coverage, misses, poor cutting in, improper use of application of materials. Apply coats of the proper consistency as received from the container.
i. Sand: Semi-gloss, medium and high gloss shall be sanded lightly between coats.
j. Dryness: Each coat applied shall be thoroughly dry before the next coat is applied. Follow approved manufacturer's directions for drying time. completion.

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UNIVERSITI TEKNOLOGI MARA

NO. RUJUKAN PROJEK: 200-PPII(BP.5/3/158)-ARC

TARIKH: 20 24 | 31 DIS.

TAJUK LUKISAN: **METHOD OF STATEMENT FOR EXTERNAL PAINTING**

SKALA: **N.T.S**

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i. Doors :

1. DO NOT paint stainless steel or bronze door butts.
2. Paint steel door butts in the following manner: Paint the trim half of each butt 2 coats to match the color of the door trim: and paint the door half of each butt 2 coats to match the color of the finish of the door. Paint the pivot portion to match the trim.
3. Exterior doors shall have tops, bottoms and side edges finished the same as the exterior faces of these doors.
4. Do not paint over label on steel doors and frames, and other identification labels.
5. Ledges: Finish projecting ledges, both above and below sight lines as specified for surrounding surfaces.

ii. Mechanical and Electrical Items

1. Removable grilles, gratings, louvers and access panels for convectors and ventilating system and perimeter heating enclosures shall be removed and painted separately, if not factory finished. Reinstall when dry.
2. Where the back of the unit, wall or insulation are visible through grilles or louvers, paint such surfaces. Visible portions of ducts behind grilles shall be painted matte black.
3. Paint access doors and frames to match the surface in, which they occur.
4. In Compartment Room, walls shall be painted, floor sealed with concrete sealer, all thermally insulated pipes shall be painted. Equipment will not be painted: Mask and cover equipment and floor. Equipment will not be painted. All gas piping will be painted.
5. Use heat resistant epoxy paint on pipes and surfaces where operating surface temperature exceeds 65 degrees C.
6. Coordinate the painting of pipes, ducts and covering with Mechanical Contractor to ensure that he does not install pipe color banding, flow arrows and pipe identification until the painting of the pipes, coverings and ducts has been done.
7. Remove and reinstall electrical outlet covers.

iii. Metal

1. Paint all interior and exterior exposed metal work, including those in areas which are shown as unfinished on the room Finish Schedules, with two coats of paint over the prime coat. Include, without being limited to, all structural steel, mechanical and electrical equipment, ductwork and piping.
2. The exceptions shall be stainless steel and aluminium.
3. Ferrous Metals: Remove all rust and mili scale using power wire brushing. Remove weld flux and wash with water to remove alkali contaminants.
4. Shop Coated Steel or Iron: Remove oil or grease contaminants by solvent washing. Touch up abraded areas with rust inhibiting primer similar to that used for shop coating.
5. Galvanized Steel: Wash thoroughly with mineral spirits and wipe entirely clean using sufficient number of clean cloths. Touch up damage areas with organic zinc rich primer.

iv. Wood

- Mounting Boards: Paint both sides and edges of plywood mounting for electrical and telephone equipment with fire regardant paint before installation.

v. Concrete and Masonry

- Ensure that surfaces are clean, free from contamination. Scrap of mortar nibs of cement spatter. Remove from oil by washing with xylol or Trisodium Phosphate Solution. Remove efflorescence by dry brushing or washing with a diluted solution of Muriatic Acid – 1 part commercial Muriatic acid to 20 parts water by volume – followed by complete rinsing with clean water. Remove mildew by the application of 1 part Sodium Hypochlorite to 3 part water. If dirt is also in evidence, add ¼ kg Trisodium Phosphate to 4L of the above solutions.

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vi. Concrete and Masonry

1. Inspect to ensure properly filled and finished surface. Fill small nicks or holes with patching compound and sand smooth.
2. Cut out scratches, cracks and abrasions in wall surface as required and fill with non-shrink patching compound and sand smooth.

vii. Doors, Frame and Walls to Water Storage

1. Prepare surface and apply primer in accordance with approved manufacturer's instructions
2. Apply finish by airless or conventional spray.

viii. Patching

1. Do all retouching to ensure that the work is handed over to the Owner in perfect condition, free of runs, spatter, rust, watermarks, scratches, blemishes or other disfiguration.
2. After fully decorating retouching and finishing a room or area, notify the Consultant Architect and P.R. After inspection and acceptance, post sign "DECORATING COMPLETE – NO ADMITTANCE WITHOUT PREMISSION"
3. Repaint the entire plane of areas showing defects of incomplete coverage. Patching will not be permitted.

11. FIELD QUALITY CONTROL

a. Arrange a site meeting between the contractor and approved paint manufacturer's representative prior to the commencement of the painting operations to discuss the painting and finishing procedures to be used and to analyze the surface conditions in order that alternative recommendations may be made to the Employer and Architect should adverse conditions exist. Discuss the following items.

i. Environmental conditions for each area
ii. Maximum moisture readings or surfaces and type of reading meter to be used.
iii. Remedy of defects in surfaces
iv. Paint thickness measurements and acceptable tolerances

b. Arrange with the approved paint manufacturers to visit the site at weekly intervals or more often if requested, during the surface preparation and painting operations to ensure that the proper surface preparation has been completed, the specified paint products are being used, the proper number of coats are being applied and the agreed finishing procedures are being used. Arrange for the approved paint manufacturer to regularly submit written reports to S.O.

c. An area located in the building will be designated for site tests.

d. Apply samples of finishes in the testing area. Apply the samples with the correct material, number of coat, color, texture, and degree of gloss required. Refinish it if required, until acceptance of the Manufacturer obtained.

e. Leave test areas undisturbed until completion of the work. Approved work in the test area shall serve as a standard for similar work throughout the project.

f. Work, which does not match the approved sample finishes, shall be corrected and refinished at no expense to the Employer.

12. EXTERIOR FINISHES

a. Steel: 1 coat exterior metal alkyd primer, 1 coat alkyd undercoat, 2 coats exterior alkyd enamel gloss.

13. INTERIOR FINISHES

a. Concrete: 4 coat interior latex primer-sealer alkali resistant (walls and ceiling) coat tinted alkyd undercoat (column and beams). 2 coats interior alkyd semi-gloss or eggshell enamel
b. Concrete Block: 1 coat interior latex primer-sealer alkali resistant, 1 coat tinted alkyd undercoat, 2 coats interior alkyd semi-gloss or eggshell
c. Steel-Primer: Touch up damage areas of primer coat with primer, 1 coat alkyd enamel undercoat, 2 coats interior alkyd enamel semi-gloss or eggshell.
d. Concrete Floor (Refer to Room Finish Schedule for Locations): 2 coats polyurethane floor paint
e. Gypsum Board: 1 coat acrylic primer, 1 coat tinted alkyd undercoat, 2 coats interior alkyd enamel of selected gloss.
f. Surface visible through Grilles, Registers, etc: 2 coats alkyd enamel flat back
g. Wood-Paint Finish (Mounting Boards): 1 coat fire retardant undercoated, 2 coats fire retardant, paint both sides before installation.
h. Water-Storage (Door Frames and Walls): 1 coat primer, coatings, 2 coats finish-Amercoat Coatings or approved equal.
i. Wood Carvings: 3 coats of polyurethane lacquer.

14. WARRANTY

a. Submit a written executed by the contractor agreeing to provide finishes free of defects in material and workmanship affecting appearance and performance (as per paragraph 1.3 Work Included). Within the specified warranty period which is five (5) years from the date of substantial completion.

15. CLEANING

a. Promptly as the work proceeds and on completion of work, remove all paint spilled, splashed, or spattered. During the progress of the work, keep the premises free from any unnecessary accumulation of tools, equipment, surplus materials and debris. At the conclusion of the work, leave the premise neat and clean to the satisfaction of the S.O.

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METHOD OF STATEMENT FOR INTERNAL PAINTING

1. DESCRIPTION

a. Work of this section shall conform to the requirements of the Contract Documents.

2. QUALITY ASSURANCE

a. Execute this work by a firm who has adequate plant, equipment, and skilled workers to perform its expeditiously and is known to have been responsible for installation similar to that specified during the immediate past five (5) years.

3. WORK INCLUDED

a. This work shall include supply and installation of paintings works for the building interior.

4. SUBMITTALS

a. No portion of the work requiring submission of shop drawing, product datum, or sample shall be commenced until the submittal has been reviewed and approved by the Architect. Such portions of the work shall be in accordance with reviewed and approved submittals.
b. Samples shall fully represent the material to be installed in color, texture and finish range
c. Submit three (3) copies of manufacturer's maintenance instructions, including written data on physical characteristics, durability and information on the paint properties to Architect.

5. DELIVERY HANDLING AND STORAGE

a. Delivery materials to project site in original factory wrappings and in containers clearly labeled with identification of approved manufacturer, brand name, fire-hazard classification, lot number and quality or grade.
b. Follow approved manufacturer's recommendations for special delivery, storage and handling of materials.

6. WARRANTY

a. Submit a written warranty executed by the contractor and approved installer agreeing to repair or replace materials and painting works, which fails in workmanship within the specified warranty period, which is five (5) years from the date of substantial completion.

7. MATERIALS – GENERAL

a. Paints generally for the works shall be ICI (Imperial Chemical Industries) paints or approved equivalent and each type used have to be the best quality produced within each specific range.
b. All materials used in the preparation of surfaces for painting and all undercoats shall be those recommended by the approved manufacturer of the finish coat for that specific finish.

8. COLORS

a. Colors will be selected from the BS Standard range of colors and/or approved equivalent standards or shall be specially mixed or milled as necessary by the approved manufacturer. No additional payments will be apportioned for colors that have to be specially milled. Provide and keep on site, BS or other approved equivalent standards color chips of selected colors. Colors without sample chips will be rejected.

9. STORAGE

a. All materials for painting shall be delivered to site in the original sealed containers supplied by the approved manufacturers and shall be carefully stored to minimize exposure to high temperatures in accordance with approved manufacturer's instructions.

10. WORKMANSHIP

a. Commencement of Works:
   i. Interior decoration shall not commence before the work of all trades has been substantially completed and the areas concerned have been thoroughly cleaned out. Clean condition shall be maintained during interior decoration.

b. Conditions of Base:
   i. No paint shall be applied to surfaces structurally or superficially damp and all surfaces shall be free from condensation, dust and nay extraneous matter before application.

c. Protection:
   i. Before commencing work to adjoining areas which not to be painted or which may have been previously painted, these adjoining areas shall be adequately protected. Any material, which is marked, stained or mechanically damaged, shall be cleaned off and made good to the approval of the Architect. If in their opinion cleaning and making good is impractical, these materials should be completely redecorated to their satisfaction at no cost to the employer.

d. Removal of Ironmongery:
   i. With the exception of butt hinges, all ironmongery and etc. wood or steel shall be removed before the application of the finish to the body of the work and after completion shall be replaced, reinstalled, eased, adjusted and oiled.

e. Inspection and Approval:
   i. Prior to painting, all surfaces to be painted shall be inspected and approved by the Architect.
   ii. Each coat of paint, both externally and internally, shall be similarly inspected and approved before proceeding with the next coat.
   iii. Preparation and Finish of Plastered Surfaces
   iv. Surfaces for painting and polyurethane coating shall be clean and dry. Any efflorescence shall be removed by first wiping with a dry coarse cloth and then with a damp cloth. The surface shall be applied until efflorescence has ceased. All new plastered surfaces for polyurethane coating shall be cured for a minimum of 28 days.
   v. The surfaces shall be cleaned to remove dust, plaster splashes, oil grease and all foreign matters.
   vi. Cracks and other imperfections shall be cut out and make good with suitable fillers. Such patching works shall be allowed to dry out thoroughly before painting or polyurethane coating.

f. Preparation and Finish of Internal surfaces
   i. After surfaces have been inspected and approved by the Architect apply one coat plaster sealer and two coats of approval Polyvinyl Acetate Emulsion Paint on the internal plastered walls. The duration for drying time between the first and second coat must not be less than four hours.

g. Preparation and Finish of Gypsum Plasterboard/ Fibrous Plasterboard
   i. Brush off all loose particles and apply one coat of plaster sealer and two finishing coats of approved ICI emulsion paint or approved equivalent.

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h. Preparation and Finish of Mild Steel Surface
   i. All metalwork before fixing shall be thoroughly cleaned down to remove all dirt grease, scale and rust by wire-brushing, scraping or other means. The surfaces are to be rubbed down.
   ii. Paint one coat of Dulux Grey-Green Chromate Metal Primer F500-388, two coats of Micaceous Iron Oxide and two finishing coats of Dulux Gloss Finish A365 Line or approved equivalent.

i. Preparation of Unprimed Joinery
   i. Well sand the surface to bring it to a smooth finish suitable for a high quality finish. Apply knotting to all permissible knots, gum veins sand resin streaks. Apply one coat primer and allow to dry for not less than six hours and stop all holes, shakes and splits with hard stopping.
   ii. Filler shall be used where the grain is open. After stopping and filling, allow priming to dry for not less than eighteen hours. Any shop primed joinery which does not receive the final coat within eight weeks shall be considered unprimed for the purpose of preparation.

j. Preparation of Shop Primed Joinery
   i. Inspect for imperfect knotting and damaged or inadequate priming, make good and touch up as necessary. Stop all holes, shakes and silts with hand stopping. Where the grain is sufficiently open fillers shall be used.

k. Preparation of Joinery for Clear Finish
   i. Well sand the surface to bring to a smooth finish suitable for a high quality finish. Stop up any defects with plastic wood of approved manufacture tinted to match color of timber or stain.

11. TESTING

a. All materials for paint and film finishes shall be subject to test including but not limited to the followings: -

   i. Fading and color fastness
   ii. Bending and scratching resistances
   iii. Oxidation, weathering and accelerated weathering
   iv. Resistance to mould, fungus and algae
   v. Application and self-leveling properties
   vi. Pigment content and fineness of grind
   vii. Chemical analysis (Particularly anti-corrosive paints)
   viii. Samples for testing shall be supplied without charge. The cost of testing shall be borne by the Contractor.

12. DRYING TIME

a. Allow as minimum as possible the drying time recommended by the approved manufacturers of the material used.

METHOD OF STATEMENT FOR CEILING

1. GENERAL INSTRUCTION

a. Unless otherwise specified or shown on the Drawings, all ceilings shall be of gypsum plasterboards or as approved by the S.O. with class 'O' fire rating and all ceiling installation shall comply with the classification of fire spread as stipulated in the 8th Schedule Uniform Building By-Law 1984.

b. All concealed ceilings shall be provided with service access to the ceiling void for maintenance of services above the ceiling space in accordance with the Drawings and approval of the S.O.

c. All sprinkler heads (drops) shall have a 12.5mm diameter oversize ring, sleeve, or adaptor through the ceiling tile to allow for free movement of the sprinkler pipes. It shall also comply with the local fire regulations and to the S.O's approval.

d. The Contractor shall not commence the ceiling installation works until the building is effectively weather-tight and the work area of wet trades has been completed and dried.

2. SUBMITTALS

a. Unless otherwise specified, the Contractor shall submit manufacturer's shop drawings and design calculations for the complete proprietary ceiling system showing compliance to all specifications including the method of installation of the ceiling board/panels, hangers, fittings, and all accessories duly certified by an Architect registered with the Board of Architects or a P.E. with a practicing certificate registered with the Board of Engineers Malaysia.

b. The contractor shall submit a method statement from the proprietary ceiling system supplier/manufacturer of the installation works to the S.O. for approval before the commencement of the works at the site. No installation of ceiling works shall commence until approval is given in writing by the S.O.

3. SETTING OUT

a. The ceiling layout shall be planned prior to installation to determine the grid configuration, direction et cetera to ensure that a' fixings points are compatible with the structural members or other services, or both.

b. Mechanical and electrical services shall be completed before installation of the suspension systems. Mechanical services and electrical wiring systems, including cable trays, conduits, junction boxes, down-lights and other appurtenances shall be independently supported and independently braced from the ceiling support system. Suspension hangers may be installed before or during installation of services with the approval of the S.O.

c. The shop drawings used for the ceiling installation shall contain sufficient information to allow the installer to set out the ceiling grid. The finished height of the ceiling shall be shown clearly on the drawings.

d. Sufficient information should be clearly indicated on the drawings to enable the ceiling module and setting out points in each ceiling area applicable to all relevant trades to be established early. All trades shall work to the same setting out points and data.

e. The ceiling height in each area shall be marked in relation to the elevation 07:32 benchmarks and then transferred by means Of a water level, rotating laser or other approved devices. Setting out lines should be in both directions and squared accurately at the outset.

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4. ACOUSTIC REQUIREMENTS

a. Acoustic requirements specified or shown on the Drawings, such as sound absorption, sound insulation and impact sound insulation Shall be tested in accordance with BS EN 13964, BS EN ISO 140 or other acceptable standards.

b. A full test report shall be submitted to the S.O. as proof of compliance. It shall relate to the entire specified system. Any variations shall be endorsed by the test laboratory or field testing. Test reports, comments and the testing authority shall be stated in the manufacturer's trade literature or be made available upon request or both.

c. All acoustic ceilings shall be of proprietary system using mineral fibre boards or spray applied cellulose on ceiling and/or soffit of slab as approved by the S.O. and conforms to class 'O' fire rating classification comply with BS 476 Part 6 & Part 7. Materials and Ceiling Components

5. MATERIAL AND CEILING COMPONENTS

a. Zinc-Coated and Aluminium/Zinc Coated Steel

i. Zinc-coated and aluminum/zinc-coated steel used for the construction of suspended ceiling components shall With MS 1196 or Other equivalent Standards. The Contractor shall provide proof of compliance to the approval of the S.O.. Where sections have been cut from zinc-coated or aluminium/zinc-coated sheets, the cut edges shall be treated with protective anti-rust paint to prevent corrosion. All pre-painted finish for ceilings Shall be as specified under SECTION G: ROOFING.

b. Linear Strip Ceiling

i. Unless otherwise specified or shown on the Drawings, linear Strip ceiling Shall be aluminium pre-painted anodized comprising of 150mm width x 12.5mm deep x 0.6mm thick panel fixed in accordance to manufacturer's recommendation and to S.O.'s approval.

c. Plasterboard

i. All plasterboards dimensions, its tolerances and flexural breaking load shall comply with BS EN 520. The board shall carry class approval from DGFR.

ii. Unless otherwise specified in the Drawings the size for plasterboard ceiling shall be 600mm x 1200mm x 9mm thick minimum and shall be suspended from the soffit with adjustable hanger rods in accordance to manufacturer's recommendation and S.O.'s approval.

d. Plasterboard with improved adhesion at high temperature (Type F)

i. The type of board and test requirements shall be in accordance with BS EN 520, and to the approval of the S.O. The board shall carry Class approval from DGFR.

e. Plasterboard With reduced water absorption (Type H)

i. The types of moisture resistance board to receive paint finish shall be in accordanœ with BS EN 520 and to the approval of the S.O. The board shall carry Class approval from Director General of Fire and Rescue (DGFR).

f. Mineral Fibre Boards

i. Unless otherwise specified, the board size shall be 600mm x 1200mm x 15mm thick square edges. The board shall carry Class approval from the Director General of Fire and Rescue (DGFR) and the minimum sag resistance shall be of RH 99.

ii. Surface coating of the board shall be applied with vinyl latex paint in white color at the factory and the surface design/texture of the board shall be to S.O.'s approval.

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TARIKH: 20 24 | 31 DIS.

TAJUK LUKISAN: **METHOD OF STATEMENT FOR CEILING**

SKALA: **N.T.S**

NAIB CANSELOR	:	PROF. DATUK DR. SHAHRIN BIN SAHIB @ SAHIBUDDIN
TIMBALAN NAIB CANSELOR	:	PROF. Ts. Sr Dr. MD YUSOF HAMID
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KETUA BAHAGIAN PEMBANGUNAN INFRA	:	MOHAMMED IZRAI BIN ABD RAZAK
ARKITEK	:	ZAHIRUDDIN JAIDIR
DILUKIS OLEH	:	HAZARUL
PENGURUS PROJEK / DISEMAK	:	Ir. MOHD FAZLI MOKHTARUDDIN / NOOR AZNIZA BAHARUDDIN

INDEKS PINDAAN

NO HELAIAN: **69**

g. Fiber Cement Ceiling Panel

i. Fibre cement ceiling panel shall be asbestos free and shall be an autoclaved cellulose fibre cement flat board. The basic composition consists of cement, refined sand and cellulose fibre. The material shall be classified as Class 'O' and shall be 'Fire- Listed' under SIRIM QAS Fire Listing Scheme.

h. Acoustic Glass Wool Ceiling Panel

i. Acoustic glass wool ceiling panel shall be lightweight fibre glass wool material with high acoustical sound absorption of NRC: 0.90-1.00 (ASTMC 423). Unless otherwise specified the size of the panel shall be 600mm x 1200mm x 20mm thick, square edge fixed to aluminium tee exposed grid systems, suspended from the soffit with adjustable hanger rods in accordance to the manufacturer's recommendation and S.O.'s approval.

i. Glass Fibre Reinforced Gypsum (GRG)

i. GRG Boards are manufactured by glass fibre reinforced gypsum and comprise of non-combustible high—grade gypsum casting plaster with glass fibre membranes. Unless otherwise specified shall be in sizes of 1200mm X 900mm x 9mm thick. The board Shall conform to the following:

a) Fire performance : GRG Boards are rated non-combustible as defined in BS 476: Part 4.

b) Dry Density : Approx. 1660kg/m2

ii. GRG boards shall be installed in accordance with the manufacturer's recommendation and S.O.'s approval.

j. Cornice

i. Unless otherwise specified, cornice Shall be provided Of the same ceiling material for all plaster ceiling materials.

ii. Cornice shall be fixed to the walls and ceiling using proprietary adhesive or as recommended by the manufacturer and approved by the S.O.

iii. Large cornices shall be fixed using screws together with cornice adhesive as recommended by the cornice manufacturer and to S.O.'s approval.

iv. The cornice should be carried and handled carefully to avoid cracking the core or wrinkling the paper liner. Where the contractor shall use full lengths of cornice and mitre all joints.

v. The Contractor shall ensure accurate and level placement by marking ceilings and walls with a line at the cornice edge.

vi. Cornice with shorter length Shal installed first followed by the longer lengths by bowing out to spring mitres fit into place.

k. Reinforcing/Jointing tape

i. The tape shall not be less than 50mm width paper tape in accordance with ASTM C475 from an approved manufacturer, and to the approval of the S.O.

l. Jointing compound

i. Jointing shall be setting type or pre-mixed gypsum-based air-drying compound, in with BS EN 13963 and to the approval of the S.O.

m. Sealants

i. The application of fire sealant for plasterboard with core adhesion at high temperature (Type F) and wet area sealant for plasterboard with reduced water absorption (Type H) shall be in accordance with BS 8212 and to the approval of the S.O. The appropriate type of sealant shall be for the required type of plasterboard. Elastomeric sealants can be used at the perimeter of the dry lining or partitioning to provide an airtight construction and to the approval of the S.O.

n. Control joint

i. Unless otherwise specified, control joints shall be provided in a long continuous run of the ceiling, at not more than 12 meters centres maximum and recommended by the manufacturer and to the approval of the S.O

PROJEK:
CADANGAN NAIKTARAF TANDAS DI ARAS 2, 3 DAN 4 BANGUNAN AKADEMIK 2, KOMPLEKS AL-FARABI, ARSHAD AYUB GRADUATE BUSINESS SCHOOL (AAGBS), UNIVERSITI TEKNOLOGI MARA (UiTM) SHAH ALAM, SELANGOR DARUL EHSAN

UNIVERSITI TEKNOLOGI MARA

NO. RUJUKAN PROJEK: 200-PPII(BP.5/3/158)-ARC

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INDEKS PINDAAN

NO HELAIAN: **70**