

E2. ESTATE AND MULTI-NICHE COLUMBARIA DESIGN SPECIFICATION

E2.1 COLUMBARIA CONSTRUCTION

2.1.1 CONSTRUCTION DESIGN AND EXTERIOR FINISHES

A) GENERAL

- 1) Drawing numbers 101, 102 and 002 shall also refer.
- 2) All columbaria shall be sized so as to be NO greater than one 25mm/1inch smaller than and NOT larger than the ready installed foundation intended for use.
- 3) All external columbaria finishes shall be granite material, to be solid (lamination not permitted), architectural quality, free of cracks, chips and uniform in color. Quality of granite shall be suitable for outdoor use (interior granite is not permitted) able to withstand freeze thaw cycles of -40 - +40 degrees centigrade, new and first class in every respect to quality of work and per accepted trade practices.
- 4) All granite work shall be fabricated by skilled trade personnel, in accordance with the specification to ensure top quality finished product.
- 5) a minimum thickness of 50mm/2inches solid granite unless specified otherwise.
- 6) All columbaria exterior surfaces shall be polished unless specified otherwise, (i.e. see facing edges rock finish requirements) and shall include colour choices per unit.
- 7) All interior niche finishes to be smooth and flat no matter what the material from which they are manufactured.
- 8) The incorporation of Flutes and Pillars and other distinguishing features are preferred on all units.
- 9) The whole columbaria granite panel assembly to be secured together with stainless steel dowels and epoxy resin and with all joints sealed using a waterproofed architectural quality silicone. Epoxy and resin to be applied strictly in accordance with manufacturer's instructions.
- 10) Variations of interior niche compartment sizes are encouraged in a unit.

B) MULTI NICHE COLUMBARIA

- 1) Multi-niche Columbarium overall exterior dimensions are illustrated on the attached schematics, foundation sizes and construction are contained in the engineers drawings SK-01 and are representative guidelines only. Final columbarium selection (as to choice of style, niche, quantity, etc.) is the owner's prerogative.
- 2) Multi-unit Columbaria base shall be a minimum 203mm/8inches thickness solid granite one piece base with minimum 102mm/4inches oversize all around and outside facing edge shall be rock face finished.
- 3) Multi-unit Columbaria roof shall NOT be flat design; material shall be a minimum thickness of 125mm/5inches at edges, made of solid granite with a gable overhang all around to match with base overhang.
- 4) Multi-unit cores shall be Aluminum or Stainless Steel (s/s) sheeting and appropriately extruded structural components.
- 5) Square and round columbaria units shall have a minimum 72 niches per unit.

C) ESTATE COLUMBARIA

- 1) A maximum of two niches per unit.
- 2) A minimum thickness of 50mm/2inches solid granite side and back walls and 25mm/1inch thickness solid granite internal separating shelf.

- 3) Estate unit cores shall be granite, Aluminum or Stainless Steel (s/s) sheeting and appropriately extruded structural components.
- 4) Estate unit bases shall be a minimum 100mm/4 inches thickness solid granite one piece base with minimum 60mm/2½ inches oversize all around and outside facing edge shall be rock face finished.
- 5) Pedestal Estate (Type A) and Estate with Integral Vase (Type B) units' roof shall **NOT** be flat, Pedestal Estate with Vase units' (Type C) roof shall be flat design with rounded edges; material shall be a minimum thickness of 125mm/5inches at edges, made of solid granite with a gable overhang all around to match with base overhang on the Pedestal and Integral vase units (Type A & C).
- 6) Estate unit roof front facing edge to be designed and polished so as to permit room for family name engraving using maximum 73mm/3inches height characters.
- 7) Estate units incorporating locations for vases are to be supplied with a vase attached.

2.1.2 NICHE COMPARTMENT DIMENSIONS

- a) Niche Interior Dimensions must be minimally 330mm/13inches cubed.
- b) Niche opening extrusion shall be a minimum 317mm/12½inches cubed, where opening extrusion is smaller than inside compartment.

E2.2 COLUMBARIA SECURITY AND SEALING MEASURES

2.2.1 SECURITY MEASURES

- a) Granite niche shutters must be secured in place using bronze, aluminum or stainless rosette systems, complete with security torque vandal proof screws. Stainless shall be the preferred material. Finish design patterns should not be roses.
- b) Privacy niche sealers are to be manufactured of Stainless Steel or Aluminum plate and individual, covering one per niche opening and with all hinges hung on the same side so as all doors will open in the same direction.
- c) All niche privacy sealers to be hinged and secured with keyed locking device. Screwed locking systems shall NOT be acceptable.
- d) A Minimum three sets of keys to be provided for each columbarium, two sets for each type of estate unit lock.
- e) Each multi-niche columbarium must be provided with a minimum of three spare exterior granite shutters of matching granite as used for installed shutters.

2.2.2 WEATHER/ELEMENTS SEALING MEASURES

- a) Niche compartments shall incorporate weather seals, to protect from water ingress. All seal components shall be easily replaceable.

E2.3 SHUTTERS, VASES AND MEMORIALISATION OPTIONS

2.3.1 GRANITE SHUTTERS

- a) Granite shutters to be minimally 23mm/7/8inch thick, all granite edges to be eased; all exposed surfaces polished.
- b) All granite shutters to be per individual niche compartment and fully cover the compartment; doubles or quad covers are not acceptable.
- c) All shutters to finish flush from base to underside of roof and from side to side; not to be recessed so as to permit compartment divider showing and must be able to easily lift off without the need to slide or lever out of position.
- d) All granite shutters to be black.
- e) Each unit shall be supplied with a minimum 3 spare granite shutters.

2.3.2 MEMORIALISATION DESIGNS

- a) All Estate Columbaria shutters shall be supplied ready to accept engraving by others.
- b) The Square Multi-unit columbaria shall be supplied with shutters predrilled to receive Memorialisation Plaques on a minimum two opposite faces.
- c) The Round Multi-unit columbaria shall be supplied ready to accept engraving by others.

2.3.3 ESTATE COLUMBARIA VASES

- a) All vases shall have a maximum height of 254mm/10inches from base to rim of vase.
- b) Vases shall be manufactured in matching granite same as external finishes on niche unit.
- c) Vase shall incorporate easy method of water drainage and refill.
- d) Vase shall be affixed to unit using epoxy resin, with all joints sealed using a waterproofed architectural quality silicone. Epoxy and resin to be applied strictly in accordance with manufacturer's instructions.

E2.4 WARRANTIES

- a) All columbaria to be provided a minimum certificated 25 year warranty, to cover any/all defects in materials and or workmanship during the 25 year period.

E2.5 INSTALLATION ON SITE

- a) The contractor/supplier must provide full details of the vehicles and cranes to be used on site.
- b) All columbaria to be installed and centralized on foundations.
- c) Multi-unit columbaria face directions to be agreed with Contract Administrator prior to placement.
- d) The contractor shall be responsible for reinstating any damage occasioned to pathways, plant life, adjacent memorials, columbaria and grassed surfaces, within the work locale, all roadway surface damage occasioned through accessing the site and during the course of the work, where the damage is assessed by the Contract Administrator as requiring reinstatement by a specialist. The contractor is advised to photograph areas as a means of record prior to commencing work on site.