MASTER SPECIFICATION

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ARCHITECTURAL CONCRETE UNIT MASONRY

SECTION 04 22 23

1. – GENERAL
   1. – SECTION CONTENT
      1. General instructions specific to this section.
      2. Architectural concrete element masonry work(s): cladding for exterior cavity walls [and exposed concrete partitions located inside the building] consisting of the following products:
2. Architectural concrete elements:
3. Bricks
4. Stones
5. Mortars
   * 1. Maintenance and cleaning instructions.
     2. Appendix of all products concerned by this master specification.
   1. – MOCK-UP WALL
      1. On the worksite, build a mock-up wall measuring approx. [1,200 x 1,800 mm] to illustrate the colour of the mortar joint and the concrete elements in accordance with the specification.
      2. Before beginning masonry work, allow a period of [-----] days for the architect to inspect the mock-up and approve or reject it.
      3. The mock-up wall must remain in place throughout the work and will constitute the minimum standard for the quality of the workmanship.
6. – PRODUCTS
   1. – MANUFACTURERS
      1. The concrete elements described below are manufactured by PERMACON.
      2. Any proposal for a component deemed equivalent must be submitted to the architect for written approval, which will be based on the content of technical documents comparable to those of PERMACON (in terms of testing standards, performance, manufacturing, durability, finishes, colours and other parameters) and on samples provided by competing manufacturers.
   2. – ARCHITECTURAL CONCRETE UNITS

***Note****: The product information required to complete this section can be found in 4-APENDIX section.*

* 1. ARCHITECTURAL CONCRETE BRICKS
     1. PRODUCT AND COLOURS:

1. Product Name: \_\_\_\_\_\_\_\_\_\_
2. Finish(es): \_\_\_\_\_\_\_\_\_\_
3. Colour(s): \_\_\_\_\_\_\_\_\_\_
4. Dimensions (thickness x height x length): \_\_\_\_\_\_\_\_\_\_
   * 1. BRICK FEATURES
5. Compressive strength:
   * 1. 20 MPa
6. Density:
7. +2,000 kg/m3
8. Dimension tolerance:
9. Thickness: ±2.0 mm
10. Height: ±2.0 mm
11. Length: ±2.0 mm
12. Complies with CSA A165.2 standard.
    1. ARCHITECTURAL CONCRETE STONES
       1. PRODUCT AND COLOURS:
13. Product Name: \_\_\_\_\_\_\_\_\_\_
14. Finish(es): \_\_\_\_\_\_\_\_\_\_
15. Colour(s): \_\_\_\_\_\_\_\_\_\_
16. Dimensions (thickness x height x length): \_\_\_\_\_\_\_\_\_\_
    * 1. STONE FEATURES
17. Compressive strength:
18. 15 MPa
19. Density:
20. Over 2,000 kg/m3
21. Dimension tolerance:
22. Thickness: ±2.0 mm
23. Height: ±2.0 mm
24. Length: ±3.0 mm
    1. Complies with CSA A165.1 standard.
    2. – MORTARS

Exterior and interior non-load-bearing masonry constructions above ground level:

1. Type N 1-1-6 mortar, minimum compressive strength of 5 MPa (28-day test) as per CAN/CSA A179 specifications for property descriptions.
2. – EXECUTION
   1. – CLEANING
      1. Never clean masonry with a wire brush or chemicals (e.g., hydrochloric acid).
      2. Require a mock-up wall before approving the appropriate cleaning method for the masonry work.
   2. CLEANING MASONRY PRODUCTS
      1. During construction but after the jointing has been finished:
3. Remove excess mortar, droppings and spatters using a trowel, or any other instrument (broom, stiff non-metallic brush) that will not stain the work.
4. Once the mortar has hardened sufficiently (ideally after at least one week), the work is cleaned as follows:
5. Moisten surface with clean water, starting from the bottom.
6. Starting at the top, scrub with a non-metallic fibre brush and soapy water.
7. Rinse with clean water as required.
   1. CLEANING MASONRY PRODUCTS IN INDOOR APPLICATIONS
      1. During construction:
8. Allot mortar spatter to dry partially, then remove it with a trowel, piece of wood or carpet, etc.
9. Lightly brush the surface of the work, on both sides of the joints, with a small piece of block and brush the entire area of the work using a stiff non-metallic brush, without pressing on joints.
   * 1. Once the work is complete, when the mortar is hard enough:
10. Scrub, starting at the top, with a non-metallic fibre brush (dry scrubbing and brushing)
11. Vacuum the surface if required.
12. In extreme cases, brushing with water may be required.
13. – APPENDIX

Lists and descriptions of architectural concrete units

STONE

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Stones | Finishes | Colours | Dimensions (thickness x height x length) | | Standard |
| Aria | Smooth | *Blizzard*  *Heron*  *Range Newport Grey Rockland Black* | **Mix 3 heights:**  **A:** 90 x 60 x var. mm **B:** 90 x 102 x var. mm **C**: 90 x 172 x var. mm  **Separately:** **C:** 90 x 172 x var. mm | **Mix 3 heights:**  **A:** 3 1/2 x 2 3/8 x var. in. **B:** 3 1/2 x 4 x var. in. **C:** 3 1/2 x 6 3/4 x var. in.  **Separately:** **C:** 3 1/2 x 6 3/4 x var. in. | CSA A165.1 |
| Cinco Plus | Textured | *Range Chambord Grey Range Margaux Beige Range Newport Grey Range Scandina Grey* | **A:** 90 x 196 x var. mm | **A:** 3 1/2 x 7 23/32 x var. in. | CSA A165.1 |
| Dominion | Smooth | *Graphite*  *Limestone Milano* | **Separately:**  **A:** 90 x 190 x 390 mm **B:** 90 x 190 x 590 mm  **C:** 90 x 290 x 590 mm | **Separately:**  **A:** 3 1/2 x 7 1/2 x 15 3/8 in. **B:** 3 1/2 x 7 1/2 x 23 1/4 in.  **C:** 3 1/2 x 11 7/16 x 23 1/4 in. | CSA A165.1 |
| Lafitt | Textured | *Blizzard*  *Oasis*  *Range Chambord Grey Range Margaux Beige Range Newport Grey Range Scandina Grey Rockland Black*  *Terra* | **Mix 2 heights:**  **A:** 90 x 102 x var. mm  **B:** 90 x 178 x var. mm  **Separately:** **C:** 90 x 292 x var. mm | **Mix 2 heights:**  **A:** 3 1/2 x 4 x var. in. **B:** 3 1/2 x 7 x var. in.  **Separately:** **C:** 3 1/2 x 11 1/2 x var. in. | CSA A165.1 |
| Lafitt Alto | Textured | *Range Chambord Grey Range Margaux Beige*  *Range Newport Grey Range Scandina Grey Rockland Black* | **Mix 2 heights:**  **A:** 90 x 102 x var. mm  **B:** 90 x 178 x var. mm  **Separately:** **C:** 90 x 292 x var. mm | **Mix 2 heights:**  **A:** 3 1/2 x 4 x var. in. **B:** 3 1/2 x 7 x var. in.  **Separately:** **C:** 3 1/2 x 11 1/2 x var. in. | CSA A165.1 |
| Lamina | Textured | *Range Margaux Beige Range Newport Grey Rockland Black* | **A:** 90 x 95 x var. mm | **A:** 3 1/2 x 3 3/4 x var. in. | CSA A165.1 |
| Lexa | Textured | *Alpine Grey Cameo Beige Rockland Black* | **Mix 2 heights:**  **A:** 90 x 76 x var. mm **B:** 90 x 114 x var. mm  **Separately:** **C:** 90 x 198 x var. mm | **Mix 2 heights:**  **A:** 3 1/2 x 3 x var. in. **B:** 3 1/2 x 4 1/2 x var. in.  **Separately:** **C:** 3 1/2 x 7 13/16 x var. in. | CSA A165.1 |
| Maestro | Smooth | *Cameo Beige Rockland Black*  *Sterling Grey* | **A:** 90 x 90 x 890 mm | **A:** 3 1/2 x 3 1/2 x 35 in. | CSA A165.1 |
| Mondrian | Textured | *Blizzard Range Amber Beige*  *Range Margaux Beige Range Newport Grey Range Scandina Grey* | **Mix 3 heights:**  **A:** 90 x 76 x var. mm **B:** 90 x 114 x var. mm **C:** 90 x 198 x var. mm  **Separately:** **C:** 90 x 198 x var. mm | **Mix 3 heights:**  **A:** 3 1/2 x 3 x var. in. **B:** 3 1/2 x 4 1/2 x var. in.  **C:** 3 1/2 x 7 13/16 x var. in.  **Separately:** **C:** 3 1/2 x 7 13/16 x var. in. | CSA A165.1 |
| Vika | Textured | *Oasis*  *Range Chambord Grey*  *Range Newport Grey* | **Mix 3 heights:**  **A:** 90 x 56.5 x var. mm **B:** 90 x 123 x var. mm **C:** 90 x 190 x var. mm | **Mix 3 heights:**  **A:** 3 1/2 x 2 1/4 x var. in. **B:** 3 1/2 x 4 7/8 x var. in.  **C:** 3 1/2 x 7 1/2 x var. in. | CSA A165.1 |

BLOCKS

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Blocks | Finishes | Colours | Dimensions (thickness x height x length) | | Standard |
| Colosseo | Smooth | Charcoal  Optra  Sterling | **A:** 90 x 190 x 390 mm **B:** 90 x 190 x 590 mm | **A:** 3 1/2 x 8 x 16 in. **B:** 3 1/2 x 8 x 24 in. | CSA A165.2 |

BRICK

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Bricks | Finishes | Colours | Dimensions (thickness x height x length) | | Standard |
| Cardin | Smooth | Arctic White Blizzard | **A:** 90 x 79 x 257 mm | **A:** 3 1/2 x 3 1/8 x 10 1/8 in. | CSA A165.2 |
| Cinco Plus | Textured | Range Chambord Grey Range Grey & Black Range Lennox Grey Range Margaux Beige Range Newport Grey Range Scandina Grey Rockland Black | **A:** 90 x 92 x var. mm | **A:** 3 1/2 x 3 5/8 x var. in. | CSA A165.2 |
| Melville Norman | Smooth | Alpine Grey Rockland Black  Sterling Grey | **A:** 90 x 57 x 290 mm | **A:** 3 1/2 x 2 1/4 x 11 7/16 in. | CSA A165.2 |
| Melville Slik | Smooth | Alpine Grey  Cameo Beige  Oasis  Range Chambord Grey Range Margaux Beige Range Newport Grey Range Scandina Grey Rockland Black  Sterling Grey  Terra | **A:** 90 x 79 x 257 mm **B:** 90 x 79 x 257 and 212 mm | **A:** 3 1/2 x 3 1/8 x 10 1/8 in. **B:** 3 1/2 x 3 1/8 x 10 1/8 and 8 3/8 in. | CSA A165.2 |

END OF SECTION