DUROCK POOL-KOTE MARBELIZING SYSTEM FOR <u>EXPANDED POLYSTYRENE ICF POOLS</u>

PART 1: GENERAL

The information contained herein is subject to periodic revisions. Contact DuROCK to confirm that this is the most recent version. Ensure that this system complies with all authorities having jurisdiction over its use.

1.1 MATERIALS

All materials shall be manufactured and/or supplied by DuROCK Alfacing International Limited. Except where expressly stated, no product shall be altered by adding foreign substances of any kind. Use of accelerators or rapid binders is strictly prohibited.

1.2 DELIVERY

All materials shall be delivered to the jobsite in original, unopened containers with all identification labels intact. Upon arrival, all materials shall be inspected, and DuROCK Alfacing International Limited shall be immediately informed of any discrepancies. **Under no circumstances shall any wet material be permitted to freeze**.

1.3 STORAGE

All materials shall be stored off the ground, in a dry place, away from direct sunlight and shall be protected from any possible contamination or damage. Wet materials shall be stored at temperatures above $5^{\circ}C$ ($41^{\circ}F$) and below $40^{\circ}C$ ($104^{\circ}F$).

1.4 SUBSTRATE

ICF shall be buried-web, expanded polystyrene (EPS), insulated concrete forms installed in accordance with manufacturer's instructions. EPS shall be compliant with CAN/ULC-S701, Type 2.

Exposed concrete shall be allowed a minimum of 28 days to cure. ICF concrete shall be allowed a minimum of 7 days to dry. Polished concrete shall be scarified, or etched with muriatic acid, rinsed, and allowed to dry.

The substrate shall be examined prior to the installation of any system. Any portion of the substrate that has been improperly installed, damaged in any way, or subject to deterioration, shall be replaced.

The substrate surface shall be plumb, straight, and free of cracks, waves or imperfections, with surface variations less than 2 mm per meter (¼ inch in 10 ft).

Substrate shall not deflect more than L/720.

Substrate shall be free of efflorescence, releasing agents, paraffin, pollution buildup, oil, frost, moisture, loose material, paint, or any other foreign matter.

1.5 ENVIRONMENTAL CONDITIONS

Surface and ambient temperatures shall be 5°C (41°F) or greater when applying coatings and shall remain so until they have fully set and dried (minimum of 24 hours). Coatings shall not be applied in direct sunlight at temperatures exceeding 30° C (86° F). All work shall be protected from winds exceeding 25 km/hr (15 mph), from rain, hail, snow, and all other possible damage until all coatings have fully set and dried (minimum of 24 hours).

1.6 EXECUTION

This system shall be installed by an established, experienced, competent contractor who is recognized by DuROCK Alfacing International Limited. Periodic inspections shall be performed by a qualified third party. DuROCK Alfacing International Limited assumes no liability for installation or workmanship. Adjacent areas shall be protected when applying coatings.

PART 2: MATERIALS

2.1 REINFORCING MESH – DuROCK alkali-resistant fibre glass mesh 5 oz. Standard Mesh [nominal weight 165 g/sq m (4.9 oz/sq yd)]. 15 oz. Hi-Impact Mesh [nominal weight 522 g/sq. m (15.4 oz/sq yd)]

2.2 WATER RESISTIVE BARRIER (WRB) – DuROCK Cement Bear

Mixing instructions: Gradually add 30 pounds (13.5 kg) of Type 10 Portland Cement to one half pail of Cement Bear being continually mixed until a workable consistency is obtained. Let the mixture stand for five minutes, then remix and use. Do not add water. Discard any material that has begun to stiffen.

2.3 BASE COAT – DuROCK Prep-Coat Fine

Mixing instructions: Gradually add 33 pounds (15 kg) of Type 10 Portland Cement to one half pail of Prep-Coat being continually mixed until a workable consistency is obtained. Let the mixture stand for five minutes, then remix and use. Up to 8 ounces (225 ml) of water may be added to enhance workability only. Discard any material that has begun to stiffen.

2.4 FINISH COAT – DuROCK Pool-Kote

Mixing instructions for First Coat White Finish: Gradually add one bag of Pool-Kote to 3 litres (105 oz) of **Pure Cement Binder** and 1 litre (35 oz) of clean, potable water. Mix slowly so as not to induce air into the product. Mix until a uniform, workable consistency is attained. Let the mixture stand for five minutes, then remix and use. Discard any material that has begun to stiffen.

Mixing instructions for Second Coat White Finish: Gradually add one bag of Pool-Kote to 2 litres (70 oz) of **Pure Cement Binder** and 2 litres (70 oz) of clean, potable water. Mix slowly so as not to induce air into the product. Mix until a uniform, workable consistency is attained. Let the mixture stand for five minutes, then remix and use. Discard any material that has begun to stiffen.

Mixing instructions for First and Second Coat Coloured Finish: Gradually add one bag of Pool-Kote to 4 litres (140 oz) of **tinted Premixed Cement Binder**. Mix slowly so

as not to induce air into the product. Mix until a uniform, workable consistency is attained. Let the mixture stand for five minutes, then remix and use. Pot life is one hour. Discard any material that has begun to stiffen.

PART 3: EXECUTION

3.1 WRB, BASE COAT, AND MESH (FOR THE ICF ONLY)

- **3.1.1** ICF shall be rasped to remove any waves, bumps, jagged edges or areas that show signs of yellowing.
- **3.1.2** Cement Bear WRB shall be applied at a uniform, nominal thickness of 2 mm (1/12 in). Hi-Impact (15 oz) mesh shall immediately be embedded into the WRB, installed tight, straight, and free of wrinkles, ripples, or waves. Joints shall butt one another, not overlap.
- **3.1.3** Cement Bear WRB shall be allowed to dry a minimum of 24 hours before applying Prep Coat Fine base coat.
- **3.1.4** Prep-Coat Fine base coat shall be applied at a uniform, nominal thickness of 2mm (1/12 in). Standard mesh (5 oz) shall immediately be embedded into the base coat, installed tight, straight, and free of wrinkles, ripples, or waves. Mesh joints shall be overlapped a minimum of 50 mm (2 in). Inside and outside corners shall receive two layers of mesh. Base coat and mesh shall return a minimum of 50 mm (2 in) onto the concrete floor slab. Additional base coat shall be applied at the interface of the wall and floor to create a cove with a 75 mm (3 in) radius.
- **3.1.5** A minimum of 24 hours shall be allowed for drying before applying finish coat.

3.2 FINISH COAT

- **3.2.1** All areas to receive Pool-Kote shall be primed. **Primer for white Pool-Kote shall be Pure Cement Binder mixed 1:1 with clean, potable water. Primer for coloured Pool-Kote shall be Premixed Cement Binder.** Allow primer to become tacky before applying Pool-Kote. Re-apply primer if it has dried to the touch before Pool-Kote is applied. Dry time varies with ambient conditions.
- **3.2.2** The first coat shall be applied at a uniform, nominal thickness of 3.2 mm (1/8 in) and raked to create indentations that will key with the second coat.
- **3.2.3** The first coat shall be allowed to dry a minimum of 24 hours before applying the second coat.
- **3.2.4** The second coat shall be applied at a uniform, nominal thickness of 3.2 mm (1/8 in). The second coat shall be uniformly smooth and straight. Minimum combined thickness of both coats shall be 6.4 mm (1/4 in). When product has set and is dry to the touch, polish surface with a stainless steel trowel until surface is smooth and desired finish is achieved.
- **3.2.5** A minimum of 24 hours shall be allowed for drying.
- **3.2.6** Before filling pool, mix 6 parts water to 1 part muriatic acid, spray the solution on all surfaces, scrub, and rinse with water to remove all acid. Wear proper personal protective equipment when using muriatic acid.