



City of Richmond

December 14, 2010
File: 4185Q

**Business and Financial Services
Department
Finance Division**
Telephone: 604-276-4218
Fax: 604-276-4162

Attention: To All Bidders

Dear Sir/Madame:

**Re: Request for Quotation 4185Q – Supply and Installation of Flooring at Minoru Arenas -
Addendum One**

This Addendum includes items of clarification, forms part of the Contract Documents and shall be read, interpreted and coordinated with all other parts. Please review and consider the following information in the preparation of your quotation:

Floor specifications are as follows:

1 PART 1 – GENERAL

1.1.1 Products Supplied

- A. Resilient (rubber) athletic flooring
- B. Accessories required for installation, maintenance and repair.

1.1.2 Related Requirements

- A. Section 02 25 00 – Existing Material Assessment
- B. Section 03 05 00 – Common Work Results for Concrete
- C. Section 06 05 00 – Common Work Results for Wood, Plastics, and Composites
- D. Section 07 05 00 – Common Work Results for Thermal and Moisture Protection
- E. Section 07 10 00 – Damp proofing and Waterproofing

1.2 REFERENCES

- 1.2.1 American Society for Testing & Materials (ASTM)

- A. ASTM D2047: Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as measured by the James Machine.
- B. ASTM D2240: Standard Test Method for Rubber Property (Durometer Hardness).
- C. ASTM D5116: Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products.
- D. ASTM E648: Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
- E. ASTM E662: Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
- F. ASTM E1745: Standard Specification for Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.
- G. ASTM F970: Standard Test Method for Static Load Limit.
- H. ASTM F1869: Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.
- I. ASTM G21: Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi.
- J. ASTM F710: Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.

1.2.2 National Fire Protection Association

- A. NFPA 101: Life Safety Code®.

1.3 SUBMITTALS

N/A

1.3.1 Action Submittals

- A. Provide Manufacturer' s current printed data sheets on specified products (flooring, adhesives, accessories, etc.).
- B. Provide samples for verification of such characteristics as color, texture and finish.

1.3.2 Informational Submittals

N/A

1.3.3 Closeout Submittals

- A. Provide Manufacturer' s current maintenance guidelines as published by the Manufacturer.

B. Provide Manufacturer' s current standard warranty as published by the Manufacturer.

1.3.4 Maintenance Material Submittals

A. Provide extra stock materials for use in facility operation and maintenance. Provide amount of approximately 2% of the total floor surface, of each type, color and dye lot.

1.4 QUALITY ASSURANCE

A. Manufacturer must have experience in the manufacturing of prefabricated rubber athletic flooring.

B. Installer must have performed installations of the same scale in the last three (3) years.

1.5 DELIVERY, STORAGE AND HANDLING

A. Materials must be delivered in Manufacturer' s original, unopened and undamaged containers with identification labels intact.

B. Store material upright on a clean, dry, flat surface protected from all possible damage, and protect from exposure to harmful weather conditions.

C. Recommended environmental condition for storage is a minimum of 55oF (13oC).

D. Material need not suffer damage during handling (i.e. edge chipping, excessive warping, etc.).

1.6 SITE CONDITIONS

A. Maintain a stable room and sub-floor temperature for a period of 48 hours prior, during and 48 hours after installation. Recommended range: 65oF to 86oF (18oC to 30oC).

B. Installation to be carried out no sooner than the specified curing time of concrete sub-floor (normal density concrete curing time is approximately 28 days for development of design strength).

C. Moisture vapor emission content of the concrete slab must not exceed the tolerance of the adhesive used when tested using the anhydrous calcium chloride test as per ASTM F1869.

1.7 WARRANTY

A. Provide Manufacturer' s current standard warranty.

B. The rubber athletic flooring is warranted to be free from manufacturing defects for a period of three (3) years from the date of shipment from the Manufacturer.

2 PART 2 – PRODUCT

2.1 MANUFACTURED PRODUCTS

2.1.1 Manufacturers

A. Mondo America Inc.:

I. North America Headquarters and Manufacturing Plant, 2655 Francis-Hughes, Laval, QC, Canada. Toll Free: USA 1 800 361-3747 or CAN: 1 800 663-8138

Toll Free anywhere in North America: 1 800 441-6645

B. Mondo USA:

I. Southwest Office, 1705 West NW Hwy., Suite 255, Grapevine, TX, Toll Free: 1 888 966-6369

II. Western Office, 4208-198th Street S.W., Suite 105, Lynnwood, WA, Toll Free: 1 800 962-5334

III. Atlantic Office (Northeast), 1100 East Hector Street, Suite 160, Conshohocken, PA, Toll Free: 1 888 553-0002

2.1.2 Description

Product to be supplied is 36" x 36" x 0.934" non interlocking resilient floor tile installed to match existing patterns with colors to be confirmed by Owner.

A. MONDO RAMFLEX is prefabricated rubber athletic flooring, calendered and vulcanized with a base of natural and synthetic rubbers, stabilizing agents and pigmentation, as manufactured by MONDO AMERICA INC. or approved equal.

B. Thicknesses: 0.315" (8mm) and 0.394" (10mm).

C. Colors: provided in standard, solid background colors with random marbling throughout material.

D. Finish: hammered.

E. Manufactured in two layers which are vulcanized together. The shore hardness of the top layer will be greater than that of the bottom layer; shore hardness of layers to be recommended by the Manufacturer and the limits specified.

2.1.3 Performance

A. Performance of the prefabricated rubber athletic flooring to conform to the following criteria:

Performance Criteria	Test Method	Result
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Hardness Shore A	ASTM D 2240	77/71
Critical Radiant Flux	ASTM E 648, NFPA 101	0.58 W/cm ² , Type I
Optical Density of Smoke	ASTM E 662	< 450, Class I
Fungal Resistance Test	ASTM G 21-90	No growth
Coefficient of Friction	ASTM D 2047	1.0 dry, 1.2 wet
V.O.C. Compliant	ASTM D 5116	Yes
Color Stability		Good
Light reflection		Average
Chemical Resistance		Good

2.1.4 Materials

- A. Provide MONDO RAMFLEX prefabricated rubber athletic flooring manufactured by MONDO AMERICA INC.
- B. Provide rubber athletic surface as specified in section 2.1.2 Description.

2.2 ACCESSORY PRODUCTS

- A. Provide adhesive certified by the Manufacturer: PU 105 polyurethane adhesive or EP 55 epoxy adhesive (refer to instruction manual of adhesives provided by rubber athletic flooring Manufacturer).
- B. Patching or leveling compound to be supplied and/or recommended/approved by rubber athletic flooring Manufacturer.

3 PART 3 – EXECUTION

3.1 INSTALLERS

- A. Refer to section 1.4 of this document for information on installers.

3.2 EXAMINATION

- A. Concrete or asphalt subfloors to be placed a minimum of twenty-eight (28) days prior to the installation of rubber athletic flooring.
- B. Concrete or asphalt subfloors on or below grade are installed over a suitable moisture retardant membrane. Water vapor membrane complies with specification in ASTM E1745.
- C. No concrete or asphalt sealers or curing compounds are applied or mixed with the subfloors (refer to Section 03 05 00 – Common Work Results for Concrete of Division 3).
- D. The under layment is adequate (if installing over wood subfloors, Mondo only recommends APA (Engineered Wood Association) Exterior grade plywood or CANPLY Exterior Certified plywood (Group 1, CC type).
- E. Smooth, dense finish, highly compacted with a tolerance of 1/8" in a 10 ft radius (3.2 mm in 3.05 m radius). Floor Flatness (FF) and Floor Levelness (FL) numbers are not recognized.

3.3 PREPARATION

- A. Prepare subfloor in accordance with Manufacturer's current printed Subfloor Preparation guidelines.

3.4 INSTALLATION

3.4.1 Installation of Tiles

- A. Install rubber athletic flooring in accordance with Manufacturer's current printed Installation Manual.

3.5 REPAIR

- A. Refer to section 1.3.4 for extra stock materials.
- B. Repair material must be from the same dye lot as material supplied for initial installation.
- C. Repairs are to be performed by qualified installers/technicians only.

3.6 CLEANING

- A. Initial cleaning should only be performed 72 hours after the rubber athletic surface has been completely installed.
- B. Maintain rubber athletic flooring according to Manufacturer's current maintenance instructions for specified product.

3.7 PROTECTION

A. Rubber athletic flooring surface can be protected with Masonite or accepted alternate, during and after the installation, prior to acceptance by the Owner.

Bidders must sign and include this Addendum with their submission.

Signature, Name and Title

Yours truly,

A handwritten signature in black ink, appearing to read "Sumita Dosanjh". The signature is written in a cursive style with a large, prominent initial "S".

Sumita Dosanjh
Buyer II - Contracting Specialist