**ALTRO Ollero**

**Rubber Flooring Tiles**

SECTION 09657

RESILIENT TILE FLOORING

**PART 1 GENERAL**

* 1. SUMMARY

.1 Section Includes: This section includes: Heavy-duty resilient tile flooring

.2 Conform with requirements of all Sections of Division 1, General Requirements, as it applies to the work of this Section Related Sections:

.1 03 30 00 - Cast-in-Place Concrete: Concrete finishing.

.2 06 10 00 - Rough Carpentry: Plywood floor sheathing.

.3 07 26 00 - Vapor Retarders

.4 09 62 00 - Athletic Flooring

.5 09 65 16 - Resilient Sheet Rubber Flooring

.6 09 65 13 - Resilient Base and Accessories

* 1. REFERENCES
1. **ASTM C423** Standard Test Method for Sound Absorption, Noise Reduction Coefficient.
2. **ASTM C501** Standard Test Method for Relative Resistance to Wear of Rubber Tile by the Taber Abraser.
3. **ASTM D2047** Standard Test Method for Coefficient of Friction of Polish-Coated Floor Surfaces as measured by the James Machine.
4. **ASTM D2240** Standard Test Method for Rubber Property-Durometer Hardness
5. **ASTM D395B** Standard Test Method for Rubber Property-Compression Set
6. **ASTM D412** Standard Test Method for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Eastover’s – Tension
7. **ASTM D5116** Standard Guide for Small-Scale Environmental Chamber Determinations of Organic Emissions from Indoor Materials/Products (V.O.C).
8. **ASTM E492** Standard Test Method for Impact Sound Transmission
9. **ASTM E648-97** Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source
10. **ASTM F137-03** Standard Test Method for Flexibility of Resilient Flooring Materials with Cylindrical Mandrel Apparatus
11. **ASTM F150** Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring
12. **ASTM F1914-98** Standard Test Method for Short-Term Indentation and Residual Indentation of Resilient Floor Covering
13. **ASTM F925-97** Standard Test Method for Resistance to Chemicals of Resilient Flooring
14. **ASTM F970-87** Standard Test Method for Static Load Limit
15. **ASTM G21** Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi
16. Phillips Roll Chair Test Method for Numeric Rating of Surface Structure
17. Federal Standard 101B/NFPA 99 12-4.1.3.8 –Static Decay Test Method 4046
18. California Specification 01350 (CHPS Compliant for VOC Emissions) - -Emission tests are performed following California Dept. of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, CA/DHS/EHLRB/R-174, 07/15/04
19. Resilient Floor Covering Institute (RFCI)
	1. RFCI
20. American Concrete Institute
	1. ACI 302.1R
	2. ACI 302.2R
	3. SUBMITTALS
21. Product Data: Submit manufacturer’s current printed product literature, specifications, installation instructions, and field reports in accordance with Section 01330 - Submittal Procedures.
22. Shop Drawings: Submit shop drawings to indicate materials, details, and accessories in accordance with Section 01330 - Submittal Procedures including but limited to the following:
23. Submit a cut diagram indicating seam locations. Use mitered seam layouts for corners when changing directions 180 degrees (e.g. when running material down corridors which bisect at a right angle), unless approved otherwise.
24. Samples: Submit duplicate sample pieces of material in accordance with Section 01330 - Submittal Procedures.
25. Closeout Submittals: Submit the following:
26. Operation and Maintenance Data: Submit manufacturer’s operation and maintenance data for incorporation into manual specified in accordance with Section 01780 – Closeout Submittals. Include methods for maintaining installed products and precautions against cleaning materials and methods detrimental to finishes and performance.
	1. QUALITY ASSURANCE
27. Installer Qualifications: Installer experienced in performing work of this section who has specialized in installation of work similar to that required for this project.
	1. Training: Installer who has attended an Altro flooring installation training clinic or who has successfully installed Altro previously.
	2. Awarded flooring contractor must use in-house installers.
	3. Awarded flooring contractor must be able to provide recent Altro references with contacts.
28. Mock-ups: Install at project site a job mock-up using acceptable products and manufacturer approved installation methods, including concrete substrate testing.
	1. Maintenance: Maintain mock-up during construction for workmanship comparison; remove and legally dispose of mock-up when no longer required.
	2. Incorporation: Mock-up may be incorporated into final construction upon Owner’s approval.
29. Pre-installation Meeting: Conduct pre-installation meeting to verify project requirements, substrate conditions, manufacturer’s installation instructions, manufacturer’s warranty requirements, and installer qualifications.
30. Bond Test: Install multiple bond tests using 3’ x 3’ pieces of material adhered with the appropriate adhesive to verify quality of adhesion. Remove half of each piece after 24 hours, then the other half after 48 hours. To help assess resistance to indentation, place end user equipment onto a sample for 72 hours. Document all results.
	1. SITE CONDITIONS
31. Temperature Requirements: Environmental Requirements/Conditions: In accordance with manufacturer's recommendations. areas to receive flooring shall be clean, level, dry, fully enclosed, weather tight with permanent HVAC set at a uniform temperature of at least 68F (20C) degrees and less than 85F (30C) continuously prior to, during and after installation, but for no less than 48 hours prior to and during, and for no less than 48 hours after installation. The flooring material shall be conditioned in the same manner prior to installation.
32. Close spaces to traffic during rubber flooring installation and for a period of time after installation as recommended in writing by the manufacturer.
33. Install rubber flooring materials and accessories after all other finishing operations, including painting, have been completed.
34. Where demountable partitions and other items are indicated for installation on top of sheet resilient flooring material, install flooring material before these items are to be installed.
35. Concrete substrates should not exceed 80 percent RH and/or 5 lbs. X 24 hrs. X 1000 sf. moisture vapor emissions rate tested in accordance to ASTM F 2170 and ASTM F 1869.
	1. DELIVERY, STORAGE AND HANDLING
36. Ordering: Comply with manufacturer’s ordering instructions and lead time requirements to avoid construction delays.
37. Deliver, store and handle resilient flooring materials in accordance with Section 01610 - Basic Material Requirements.
38. Inspect all deliveries to ensure undamaged goods, and for accurate product type for thickness, edge type, color and speckle. Contact manufacturer immediately if product is damaged or inconsistent with order specifications.
39. Deliver materials in manufacturer’s original, unopened, undamaged containers with identification labels intact clearly marking edge type, thickness, percentage of speckle and shade of colour(s).
40. Carefully handle all materials and store protected from exposure to harmful weather and at temperature conditions recommended by the manufacturer. Remove pallet banding if long-term storage is required, but leave other packaging intact until acclimations is to be started.
41. Flooring material and adhesive (if required) shall be acclimated to the installation area for a minimum of 24 hours prior to installation. See manufacturer’s installation guidelines for details on proper acclimation procedures. Longer acclimation may be required if product has been stored for extended time periods.
	1. WASTE MANAGEMENT AND DISPOSAL

.1 Deposit all packaging materials in appropriate container on site for recycling or reuse.

.2 Avoid using landfill waste disposal procedures when recycling facilities are available.

.3 Keep all discarded packaging away from children.

* 1. WARRANTY
1. Warranty period for Altro Ollero shall be 10 years commencing on date of substantial completion. Refer to conditions of the contract for project warranty provisions.
2. Altro Ollero product warranty reduces to 5 years when installed in ice arenas due to ice skate blades. Altro only covers and recommends 10mm and 12mm Altro Ollero in these areas.

**PART 2 PRODUCTS**

2.1 Altro Ollero

1. Rubber Tile Manufacturer: Altro Ollero by Altro

 .2 CANADA: 6221 Kennedy Rd, Unit 1, Mississauga ON, L5T 2S8, Toll Free: 800.565.4658

Tel: 905.564.1330 Fax: 905.564.0750

1. **Acceptable material: Altro Ollero**

**EDGE FINISH**

* 1. Square (38” x 38”)​
	2. Interlocking (37” x 37”)​
	3. Custom Cut size to be specified

**GAUGE**

.1 4mm, 6mm, 8mm, 10mm, and 12mm

 **COLOUR**

 Colour to be selected from current range found at [www.altrofloors.com](http://www.altrofloors.com)

 .1 **OS4 (insert remaining numeric colour code) (insert colour name)**

2. ACCESSORIES

Adhesive**:** Altro one-component urethane adhesive

**PART 3 EXECUTION**

3.1 EXAMINATION

1. Compliance: Comply with manufacturer’s product data, including product technical bulletins, product catalog, installation instructions found at [www.altrofloors.com](http://www.altrofloors.com).
2. Site Verification of Conditions: Verify substrate conditions, which have been previously installed under other sections, are acceptable for product installation in accordance with manufacturer’s instructions.
3. Inspect floor to be installed immediately upon arriving at job site; perform a moisture test.
4. Do not begin installation until substrates have been properly prepared.
5. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.
6. The installation of the rubber flooring shall not begin until the work of all other trades has been completed, particularly wet and overhead trades; sheet rock / dry wall work, sanding and painting

3.2 PREPARATION

1. Remove substrate paint, coatings and other substances that are incompatible with adhesives or contain soap, wax, oil, solvents, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
2. Ensure that substrate is dry and clean, and shall be free of depressions, raised areas or other defects that might telegraph through installed flooring.
3. Ensure that concrete or plywood substrate is flat and uniformly sloped. Allowable variations in substrate levels are +/- 1/8” in 10’-0” and 1/4” total maximum variation from levels shown
4. Concrete Substrates: The Contractor shall verify to the Owner and installer a minimum of 30 days prior to the scheduled resilient flooring installation the following substrate conditions. All substrate testing shall be documented and submitted to the Architect and Owner before commencement of the flooring installation.
5. Verify that substrates are dry, free of debris, and that all curing compounds, sealers, and hardeners have properly cured.
6. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
7. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrates pass testing.
8. Moisture Testing: Perform tests recommended by manufacturer and as follows. Proceed with installation only after substrates pass testing.

3.3 INSTALLATION

1. Installation: Install Altro Ollero in accordance with the current posted Altro Installation Practices at [www.altrofloors.com](http://www.altrofloors.com), Downloads, Technical Documents, Installation Guides.
2. Do not proceed with floor surfacing installation until all applicable site work, including substrate preparation, painting, equipment installation and other relevant work by trades affecting the installation area, has been completed.
	1. CLEANING
3. Cleaning: Remove temporary coverings and protection of adjacent work areas.
4. If installers have left any adhesive residue on the rubber flooring, contact manufacturer to determine possible solutions for removal. Do not use mineral spirits to clean adhesive off the tiles.
5. Repair or replace damaged installed products.
6. Clean installed products in accordance with manufacturer’s instructions prior to Owner’s acceptance. Current recommended maintenance procedures can be found on the Altro website at [www.altrofloors.com](http://www.altrofloors.com), Downloads, Technical Documents, Maintenance Guides.
7. Initial Cleaning: After completion of installation and before acceptance by owner, perform the cleaning operations as prescribed in the manufacturer’s Installation/Maintenance Guidelines.
8. Maintenance: Comply with manufacturer’s instructions for proper cleaning and maintenance of the products.
	1. PROTECTION
9. Protect the installed surface from damage resulting from subsequent construction activity on the site using a non-staining protective covering such as a reusable textured plastic sheeting.
10. Touch-Up: Repair any minor damage to eliminate all evidence of repair. Remove and replace work which cannot be satisfactorily repaired.
11. If recommended for this project, apply recommended sealer following manufacturer’s guidelines.

END OF SECTION