

GERBERT LIMITED

P.O. BOX 4944, LANCASTER, PA 17604—Tel.: (717) 299-5035 FAX: (717) 299-5083

NAIRN PLAIN (BATTLESHIP) LINOLEUM .080" (2.0MM); 1/8" (3.2MM); 3/16" (4.5MM)

RESILIENT FLOORING SPECIFICATIONS

1.0 RELATED DOCUMENTS

The general provisions of the contract, including general conditions and general requirements (if any), apply to the work specified in this section.

2.0 DESCRIPTION OF WORK

The extent of Resilient Flooring is shown on drawings and in schedules as specified Nairn Plain (Battleship) Linoleum.

3.0 FLOORING MATERIAL

3.1 Material shall be Nairn Plain (Battleship) Linoleum, first quality smooth-surfaced resilient sheet floor covering as manufactured by Forbo Nairn Ltd.

3.2 Nairn Plain (Battleship) Linoleum as Distributed by:

Distributor

Name

Address:

GERBERT LIMITED

Phone

Contact

P.O. BOX 4944, LANCASTER, PA 17604—Tel.:(717) 299-5035/5083—Telex.: 90-2243

Sub-Distributor or Representative

Name

Address

Phone

Contact

NAIRN PLAIN (BATTLESHIP) LINOLEUM .080"

3.3 CONSTRUCTION

Nairn Plain (Battleship) Linoleum homogeneous floor covering shall be of natural materials consisting of linseed oil, cork, wood flour, resin binders, gum and dry pigments, mixed and calendered onto natural jute backing. Pattern and color shall extend throughout total thickness of material. No asbestos.

3.4 PHYSICAL CHARACTERISTICS (dimensions are approximate)

Width - 6'-0" (183cm)
Length - 89'9" approx. (27.4 meters)
Thickness - 1/8" (3.2mm) or 1/10" (2.5mm)
Backing - Jute

3.5 MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:

3.5.1 Federal Specifications
Meets or exceeds LLL-F-1238A

3.5.2 Residual Indentation
Meets or exceeds Federal Specifications LLL-F-1238A. Using a 0.178 inch cylindrical indenter, the floor covering is loaded with a 90 lb. load for 30 seconds. The indentation is measured one hour after the load has been removed. Residual indentation amounts to 0.005" to 0.008" for a thickness of 1/8" (3.2mm).

3.5.3 Flexibility
1/8" (3.2mm) thick Nairn Plain (Battleship) Linoleum can bend around a 2" cylinder without any sign of breaking or cracking.
1/10" (2.5mm) thick Nairn Plain (Battleship) Linoleum can bend around a 1.5" diameter cylinder without any sign of breaking or cracking.

3.5.4 Resistance to Wear
After 5,000 cycles using Taber Abraser with H22 wheels, 1,000 grams load.

Maximum weight loss	1.62	grams
Average percentage weight loss	4.8	percent
Average loss in thickness	0.015	inches
Average percent loss in thickness	12-15	percent

3.5.5 Fire Resistance
Meets or exceeds requirements for Class I, NFPA Life Safety Code 101 (ASTM E-648).

NAIRN PLAIN (BATTLESHIP) LINOLEUM .080"

- 3.5.6 Recommended Load Limits
Short term load - approximately 710 p.si. (50 kg/cm²).
Long term load - approximately 85 p.si. (6 kg/cm²).
- 3.5.7 Resistance to Rolling Loads
At least 25,000 cycles of 3 wheels each loaded with
66 lbs./wheel (30 kg/wheel). No damage.
- 3.5.8 Electrical Insulation
Tested to the method described in NFPA Brochure 56A (National
Fire Protection Association), the comparative value for Nairn
Plain (Battleship) Linoleum is 10¹¹ Ohms.
- 3.5.9 Thermal Conductivity
The coefficient of thermal conductivity of Nairn Plain
(Battleship) Linoleum is 0.210 - 0.219 W/m.k.
- 3.5.10 Impact Sound Reduction
Nairn Plain (Battleship) Linoleum in 1/8" (3.2mm) gives an
improvement of approximately 6dB.
- 3.5.11 Resistance to Bacteria
Nairn Plain (Battleship) Linoleum appears to provide a self-
sanitizing quality in the form of a bactericidal effect.
Recent tests suggest that Nairn Plain (Battleship) Linoleum
has a sterile zone around the material, inhibiting
contaminants such as staphylococcus aureas.
- 3.5.12 Cigarette Resistance
Nairn Plain (Battleship) Linoleum resists cigarette burns.
Burning cigarettes will leave only a brown mark, which can be
rubbed out using steel wool or a scouring pad.
- 3.5.13 Chemical Resistance
Diluted Acids - Sulfuric, Nitric,
Hydrochloric, Acetic, Lactic, Citric.....No Effect
Sodium Hydroxide.....Softening
Ammonia.....Possible Softening
Soda Solution, Soap Solution
(slightly Alkaline).....No Effect
Gasoline, White Spirit, Paraffin, Benzene
Toluene, Methyl Alcohol, Ethyl Alcohol,
Methyl Ethyl Ketone, Ethyl Acetate, Ether,
Acetone.....No Effect
Mineral Oil, Vegetable Oil, Animal Fat.....No Effect
Blood, Urine, Excrement.....No Effect
Formaldehyde, Hydrogen Peroxide 3%.....No Effect
Lipstick.....No Effect

NAIRN PLAIN (BATTLESHIP) LINOLEUM .080"

Hot Chili Paste, Shoe Polish, Iodine.....	Staining
Betadine.....	Staining
Silver Nitrate.....	Staining/Possible Softening
Bitumen.....	No Effect
Methalyne Blue.....	Staining
Saltwater.....	No Effect

4.0

JOB CONDITIONS

Installation of Nairn Plain (Battleship) Linoleum shall not proceed until the work of all other trades has been completed, especially overhead trades. Areas shall be clean, fully enclosed, weathertight, and heated to a minimum of 64°F (18°C) for a minimum of 72 hours, prior to, during and after installation is completed. The floor covering rolls should be conditioned accordingly. Inspect sub-floor surfaces carefully. It is essential that all sub-floors be rigid, finished smooth, flat, level, clean, dry and remain permanently dry. Wooden sub-floors must be suspended, well ventilated, and permanently dry. Concrete sub-floors shall be steel trowel finished smooth, flat and level. Concrete shall be adequately cured and dry, (Maximum content of moisture 3.5%). If needed, sand concrete sub-floor to loosen dirt and other foreign materials. Vacuum to remove dust, loose dirt, and other foreign materials. Patch and repair minor cracks and other imperfections with latex powder and liquid patching materials. Areas to receive Nairn Plain (Battleship) Linoleum must be adequately lighted to allow for proper installation and seaming. See Nairn Plain Battleship installation brochure for more complete details.

5.0

INSTALLATION

Nairn Plain (Battleship) Linoleum shall be installed in a workmanlike manner in strict accordance with manufacturer's approved installation instructions using Forbo Elastocol 635 adhesive.

5.1

ADHESIVE

Forbo Elastocol 635 water emulsion adhesive. Set into wet adhesive, approximately 6 sq. yds. at a time. Trowel - 1/16" standard notch. Capacity - 15 liter/3.97 gal. Spread Rate - 150 sq. ft./gal.

NAIRN PLAIN (BATTLESHIP) LINOLEUM .080"

5.2 HEAT WELDED SEAMS (OPTIONAL)

Use Nairn Linoweld color-matched welding rod as manufactured by Forbo Nairn Ltd. Optional for seamless, hygienic, watertight installation requirements. Dimensions - 4mm diameter. Coil - 55 linear yards.

5.3 LINFORM COVED BASE (OPTIONAL)

Optional matching pre-formed cove base, aluminum reinforced at back radius, as manufactured by Forbo Nairn Ltd. Fitted and heat welded to the wall and floor covering at the seams using Nairn Linoweld welding rod and Forbo 635 Elastocol with manufacturers installation instructions. Cove sections - 6'7" x 4" x 2" (radius 7/16").

5.4 SEE NAIRN PLAIN (BATTLESHIP) LINOLEUM INSTALLATION BROCHURE FOR MORE COMPLETE DETAILS.

6.0 WARRANTY

Limited 5-year warranty. Contact Forbo Floor Coverings, Inc. for complete details.

7.0 SAMPLES

Submit samples in duplicate of the flooring materials in compliance with the related requirements of the General Conditions. Upon approval one set of samples bearing Architect's approval will be returned to the contractor. The set of samples retained by the Architect shall constitute the standard materials which they represent which are installed on the job.