Cleaning instructions

LIGHTWEIGHT ARCHITECTURE

PRECONTRAINT® MEMBRANES

SERGE FERRARI sas
BP 54 - 38352 La-Tour-du-Pin Cedex – France **T** + 33 (0)4 74 97 41 33 **F** +33 (0)4 74 97 67 20

SAS AU CAPITAL de 3 521 600€ - Siret : 300 821 873 00019 – APE : 1396 Z – N° IDENT. TVA FR : 38 300 821 873

www.sergeferrari.com

General points

Subject

The present document defines the following :

- conditions of maintenance of the FLEXLIGHT membranes,
- standard controls,
- excluded cleaning procedures and cleaning solutions,

to ensure proper operation of the structure and to prevent premature degradation of the membrane.

Field of application

This instructions applies to FLEXLIGHT polyester / PVC membranes for tensioned and permanent architectural applications.

Maintenance in accordance with the instructions given in this manual ensures a better durability of the product.

Maintenance conditions

The maintenance conditions are limited to the following operations :

- periodical or particular controls,
- periodical or particular cleaning.

The frequency and nature of the maintenance and controls depend essentially on:

- the conception of the building and the situation of the membrane
- the local climate (rain, hail, wind, snow) and the sources of pollution (leaves, pollens, dusts, atmopsheric pollution),
- the nature and intensity of dirt build up.

Controls

Periodical controls :

Periodical controls consist in performing a visual inspection of the membrane in order to confirm its validity under the following conditions:

- no tears on the edges and inside the panels,
- no peeling nor delamination at the welded joints,
- no heavy dirt build-up on the surface (dead leaves, insects, ashes...).

Whenever something unusual is noticed, the fabricator and installor of the structure must be informed and will judge which actions should be taken.

Particular controls :

Particular controls consist in performing an inspection of the same nature as the one performed during the periodical inspection, it is a diagnosis which is carried out immediately after an exceptionnal constraint, either accidental or fortuitous.

These constraints occur when the following events happen :

- Heavy storm with extreme winds reaching the high limit (or above the limit) generally admitted in the zone;
- Heavy snow fall or hail storm generating loads in the high limit (or above the limit) generally admitted in the zone;
- Accidental fall of external elements onto the membranes, those elements can be a danger from a weight, corrosion or laceration stand point.

Detergent

Serge Ferrari ® detergent (see appendix)

The washing solution is an aqueous solution of Serge Ferrari ® detergent which respects the following conditions:

Type of Dirt	Detergent Concentration	Water Temperature
LIGHT	5 %	20 °C
MEDIUM	10 %	20 °C
HEAVY	10 %	50 °C

Other detergent

The cleaning company may use another detergent from a local supplier. It is its responsibility to verify that this detergent is compatible with the membrane in the dosages and temperatures set with the detergent manufacturer.

The compatibility of the detergent with the membrane can be validated on special request to Serge Ferrari.

In all cases, the its pH should be between 5 and 11.

Cleaning

Periodical cleaning:

The PRECONTRAINT® membrane stand well against pollution because of two reasons :

- the flat and smooth surface shows very few micro cavities which are susceptible to retain dirt in the long term,
- the high quality surface treatment forms an anti adhesive protective coating on the whole fabric surface. To prevent a sedimentation of the pollution agents cleaning must be performed on a regular basis.

Cleaning procedure :

The cleaning procedure should be carried out as follow :

a) Use a soft brush (nylon) or a sponge.

b) Use a FERRARI® detergent solution :

c) Rinse thoroughly with clear water

All these operations should be carried out in accordance with the detergent's instructions for use, data sheet here enclosed.

Caution: Avoid washing under excessively high outdoor temperature conditions

SERGE FERRARI sas
BP 54 - 38352 La-Tour-du-Pin Cedex – France **T** + 33 (0)4 74 97 41 33 **F** +33 (0)4 74 97 67 20

SAS AU CAPITAL de 3 521 600€ - Siret : 300 821 873 00019 – APE : 1396 Z – N° IDENT. TVA FR : 38 300 821 873

www.sergeferrari.com

Particular cleaning:

Some dirt build-up might be difficult to remove by the cleaning procedure described above. Those dirt builds-up might consist of the following substances :

- build-up of mineral origin : grease, tar, calcareous sedimentation...
- build-up of vegetable origin : leaves, pollens, resins...
- build-up of animal origin : bird droppings, dead insects...

The nature of those build-up often prevents an efficient cleaning.

Warning : The use of solvents shall damage the membrane. Before any action, it is recommanded to evaluate the necessity of the operation and to call a specialist for advice.

In the case of heavy soiling, it is recommended to use a whashing solution at the concentration and temperature recommended for heavy dirt (Here above table) and a 700 mm wide rotating brush with water pressure generated movement.

Cleaning procedures and agents excluded

The cheminal resistance of the Précontraint® membranes against aggressions

depends on numerous factors such as : the form of cheminal agents (solid, liquid or gas), the temperature, the concentration, the duration of contacts.

In certain cases, a mix of agents can provoke a negative result, while every agent taken separately is harmless.

Therefore, the following elements must be rigourously excluded :

Cleaning pro c e d u r e s :

- abrasive powders, pastes, liquids, abrasive sponges, etc...
- generators of pressurised steam

Organic cheminal products :

acetone, gasoline, benzene, fuel, kerosene, perchlorethylene, terpentine, toluene, trichlorethylene, oil, petrol.

Inorganic cheminal products :

ammonia, nitric acid, sulfuric acid, acetic acid, chlorhydric acid, soda,caustic soda, liquid bleach.

SERGE FERRARI sas
BP 54 - 38352 La-Tour-du-Pin Cedex – France **T** + 33 (0)4 74 97 41 33 **F** +33 (0)4 74 97 67 20

SAS AU CAPITAL de 3 521 600€ - Siret : 300 821 873 00019 – APE : 1396 Z – N° IDENT. TVA FR : 38 300 821 873

www.sergeferrari.com

Appendix

SERGE FERRARI® DETERGENT

HOW TO USE
- concentration : 5% to 10% (See above cleaning procedure)
- temperature : 20°C to 50°C (See above cleaning procedure)

DESCRIPTION
This product is slightly alkaline; without soda or potash. The formul is hypoallergenic.

PRECAUTIONS FOR USE

Gloves should be worn for prolonged use.
After contact with the skin wash with water and wipe.
Can be used manually.
Always rinse after use.

Biodegradable. No bioaccumulation in earth or air.

PACKAGING

20 kg can
Ref. 6007877

225 kg barrel
Ref. 6007878

STORAGE

In a sheltered frost-free location.

Our responsibility shall not be engaged in case of non-respect of the present instructions.

SERGE FERRARI sas
BP 54 - 38352 La-Tour-du-Pin Cedex – France **T** + 33 (0)4 74 97 41 33 **F** +33 (0)4 74 97 67 20

SAS AU CAPITAL de 3 521 600€ - Siret : 300 821 873 00019 – APE : 1396 Z – N° IDENT. TVA FR : 38 300 821 873

www.sergeferrari.com

SERGE FERRARI sas
BP 54 - 38352 La-Tour-du-Pin Cedex – France **T** + 33 (0)4 74 97 41 33 **F** +33 (0)4 74 97 67 20

SAS AU CAPITAL de 3 521 600€ - Siret : 300 821 873 00019 – APE : 1396 Z – N° IDENT. TVA FR : 38 300 821 873

www.sergeferrari.com