Waterproofing Material of Concrete Body



Aston

The CS-21 waterproofing is an ideal method making concrete body itself waterproof.

Free Design Less Restriction

Design

- Not Subjected to Settlement Restriction
- Reducing the Load of Floor Slab
- Available for Outer/Inner Waterproofing

Performance

Make Concrete Body Waterproofing Body Durability Improvement

- Improve Water Tightness by Filling Fine Pores and Cracks
- Continuing Self-Healed Effect
- Suppressing Instruction of Deterioration Factors

Work Short

- Work Period

 Capable of Construction in
- Less Susceptible to Wet Weather Influence

Short Term

Short Time Span to Interrupt
 Other Type of Works Factors

10 Year Guarantee

Up-Keeping

Less Aging Easy Maintenance

- Durability Equivalent to Concrete
- Visually Confirmable Variant Location
- Partial Repair is Possible
- Easy Reworking

Accomplishment

A Lot of Accomplishment Peace of Mind for Long Time

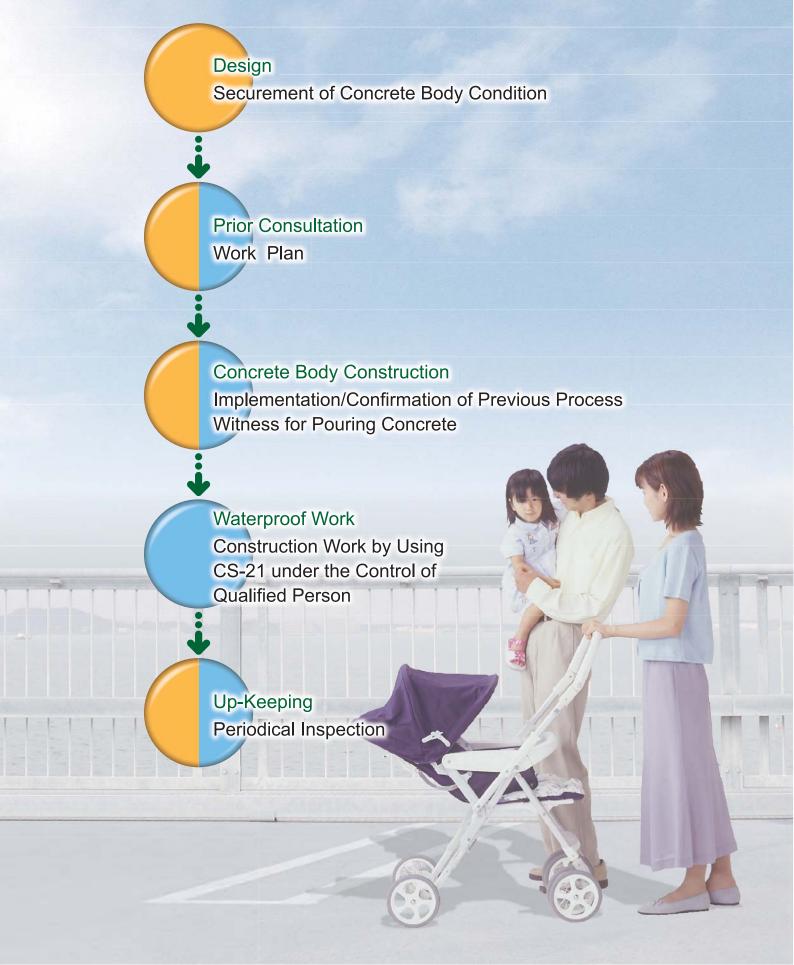
 Accomplishment for more than 15 Years, 1 Million m²

Safety

Environmentally-Friendly Performance High Safeness

- No Impact on Environment
- No Hazardous Substance Inclusion
- Non-Combustibility
- Usable to Water Supply

CS-21 waterproofing of concrete body system is the total construction supporting method starting from design phase up to maintenance management after work completion.



Important Factors

7 Important Factors to Secure the Quality of Waterproofing of Concrete Body

- Material
 - (1) Sufficient Solid Amount
 - 2 Re-Reactivity
 - ③ Reactivity to Neutralized Concrete
 - 4 Filling Performance for Fine Crack
- Concrete Body
 - (5) Adaptability of Body Concrete
- Work
 - 6 Considerable Experience and Results
 - 7 Work System by Engineers

Since the performance of waterproofing of concrete body largely differs depending on structure to be applied, concrete quality, material to be used and construction method, it is required to confirm prerequisite conditions.

CS-21, Waterproofing Material of Concrete Body

CS-21 is surface densifying material to penetrate in hardened concrete which generates stable C-S-H crystal with reaction such as un-hydrated cement and calcium component and filling fine pores and cracks. CS-21 improved the waterproofing quality by containing hydration activator.



Product Overview

- Aspects: Colorless and Transparent Solution
- Major Component: Sodium Silicate
- Concentration: 1.24 ~ 1.28g/cm³
- pH Value: 11.3 ~ 12.3
- Classification by Japan Society of Civil Engineers: Reactive
 Silicate-Based Surface Penetrant

Registration Information

NETIS Registration Number: CB-020055-V

(Design Comparison Target Technology/March 7, 2013 ~)

Implementing Test Standard

Architectural Institute of Japan JASS 8 T-301:

Quality and Test Method of Siliceous Coating > (b) Quality Standard for Permeability Coefficient

Japan Society of Civil Engineers JSCE-K 572:

Test Method for Silicate-Based Surface Impregnation (Draft)

Japan Society of Civil Engineers JSCE-K 571:

Test Method for Surface Penetrant

* Please contact us if you need CS-21 Test Result Report for those standards.

Housing Warranty Insurance

- Adaptable Housing Warranty Insurers by Confirmation Sheet Related to Article 3 Design Standard
 - Residential Warranty Corporation Anshin
 - Organization for Housing Warranty Ltd.
 (Former Name: Organization for Housing Warranty)
 - Japan Inspection Organization (JIO)
 - House G-men Co., Ltd.
 - HOUSEPLUS CORPORATION, Inc.

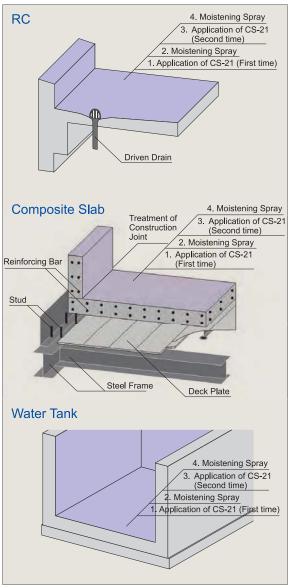
Experience of Use

- CS-21 Waterproofing Construction Achievement: 570 cases/about 1 million m²
- CS-21 and other Construction Achievement:
 333 cases of surface protection, about 298 Km²
 178 cases of modification/repair, about 33Km²
 210 cases of crack repair/water leak repair, about 43Km
 63 cases of treatment of construction joint/plastic cone part
 Total: 1354 cases (As of September 2013)

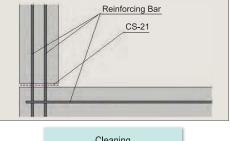
Standard Working Diagram

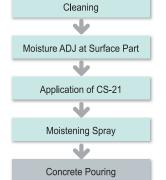
CS-21 Waterproofing of Concrete Body, CS II Method

Moisture ADJ at Surface Part Application of CS-21 (First time) Moistening Spray Application of CS-21 (Second time) Moistening Spray

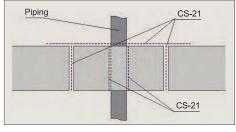


Waterproof Treatment of CS-21 Construction Joint Part





Waterproof Treatment of CS-21 Piping Part





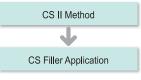
CS-21 Plastic Cone Part

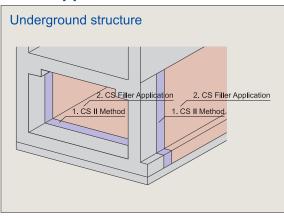
CS-21

Mortar

CS-21

CS-21 Waterproofing of Concrete Body, CS II Method + CS Filler Application Method





By surface covering on CS II method working location with polymer cement mortal CS filler, CS-21 suppresses water diffusion to outside and curing period is able to be shortened. In addition, there is the supplementary effect of calcium component, etc., by which the performance of CS-21 is maximized.

Cleaning Application of CS-21 Mortar Filling

Separator

^{*} Refer to the material [Waterproofing of Concrete Body] for detailed information on this brochure.















Aston Incorporated

14-16, Yasakahonmachi, Kita-ku, Okayama-shi, Okayama, 700-0075, Japan

Phone: +81-86-255-1511 FAX: +81-86-251-3270 http://www.cs21.jp E-mail: aston_2@cs21.jp