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REMEDIEREA DEFECTELOR DE TIP DSA - DEFECTE IN STRATUL DE ACOPERIRE AL ARMATURILOR
RETRIEVAL OF DEFECTS TYPE DSA - DEFECTS IN THE REINFORCEMENT CONCRETE COVER LAYER

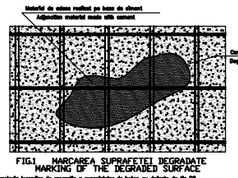


FIG.1 MANCAREA SUPRAFETEI REPARATE
MARKING OF THE REPAIRED SURFACE

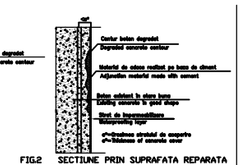


FIG.2 SECTIUNE PRIN SUPRAFATA REPARATA
SECTION THRU THE REPAIRED SURFACE

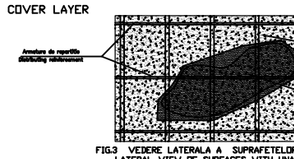


FIG.3 VEDERE LATERALA A SUPRAFETELOR CU ARMATURI NECORODATE
LATERAL VIEW OF SURFACES WITH UNACTED UPON REINFORCEMENT

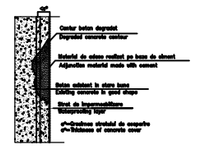


FIG.4 SECTIUNE PRIN SUPRAFATE CU ARMATURI CORESPUNZATOARE
SECTION THRU THE SURFACES WITH ADEQUATE REINFORCEMENT

REMEDIEREA DEFECTELOR DE TIP DASR - DEFECTE DE ADANCIME SI SUPRAFATA REDUSA
RETRIEVAL OF DEFECTS TYPE DASR - DEFECTS WITH REDUSED SURFACE AND DEPTH

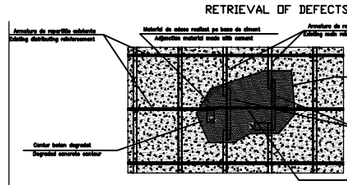


FIG.5 VEDERE LATERALA A SUPRAFETELOR CU ARMATURI ADITIONALE INADITE PRIN SUDURA
LATERAL VIEW OF SURFACES WITH THE ADITIONAL REINFORCEMENT MOUNTED BY WELDING

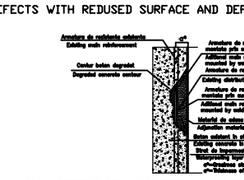


FIG.6 SECTIUNE PRIN SUPRAFETE CU MONTAREA ARMATURII ADITIONALE PRIN SUDURA
SECTION THRU THE SURFACES WITH THE ADITIONAL REINFORCEMENT MOUNTED BY WELDING

FIG.8 SECTIUNE PRIN SUPRAFETE CU INADIREA ARMATURII ADITIONALE PRIN SUPRAPUNERE
SECTION THRU THE SURFACES WITH THE ADITIONAL REINFORCEMENT MOUNTED OVERLAPING

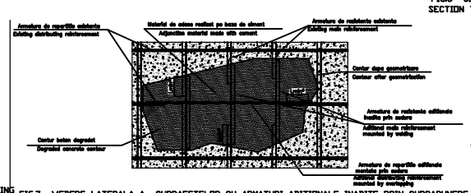
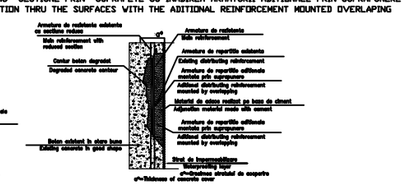


FIG.7 VEDERE LATERALA A SUPRAFETELOR CU ARMATURI ADITIONALE INADITE PRIN SUPRAPUNERE
LATERAL VIEW OF SURFACES WITH THE ADITIONAL REINFORCEMENT MOUNTED BY OVERLAPING



CARACTERISTICI TEHNICE ALE MATERIALELOR UTILIZATE/ TECHNICAL SPECIFICATION OF THE USED MATERIALS

A. Aliante/ Mortars
- Rezistenta la incarcare / Loading resistance: 1,80 N/mm²
- Densitate in stare uscata / Dry density: 1800 kg/m³
- Rezistenta la intindere / Tensile strength: 0,30 N/mm²
- Rezistenta la compresiune / Compression resistance: 18,00 N/mm²
- Rezistenta la inghetare-dezghetare / Frost resistance: 300 cicluri
- Aderenta la suport / Adherence: 1,50 N/mm²

B. Adezivi pentru rosturi / Adhesive for joints
- Rezistenta la intindere / Tensile strength: 1,80 N/mm²
- Rezistenta la compresiune / Compression resistance: 18,00 N/mm²
- Aderenta la suport umed / Adherence to wet support: 1,50 N/mm²

C. Mortare pentru beton / Concrete mortars
- Rezistenta la intindere / Tensile strength: 1,80 N/mm²
- Rezistenta la compresiune / Compression resistance: 18,00 N/mm²
- Aderenta la suport umed / Adherence to wet support: 1,50 N/mm²

D. Material de otelire pe baza de aliaj / Adjacent material made with cement
- Densitate / Density: 2,5 g/cm³
- Rezistenta la intindere / Tensile strength: 0,30 N/mm²
- Rezistenta la compresiune / Compression resistance: 18,00 N/mm²
- Rezistenta la inghetare-dezghetare / Frost resistance: 300 cicluri
- Aderenta la suport umed / Adherence to wet support: 1,50 N/mm²

E. Strat de hidroizolatie / Waterproofing layer
- Rezistenta la intindere / Tensile strength: min. 1000÷1500 N/mm²
- Rezistenta la 90° / Tensile at 90°: min. 1000÷1500 N/mm²
- Temperatura min. de aplicare pe strat suport / Minimal temperature for applying support layer: +10°C

1. Identificarea si indepartarea betonului alterat.
2. Pregatirea si indepartarea armaturii corodate pana la stratul sanatos.
3. Curatirea armaturii de rugina.
4. Protejarea armaturii cu un strat de grund.
5. Umplerea golurilor cu mortar.
6. Aplicarea stratului de protectie.
7. Finisarea suprafetei.

1. Identification and removing the damaged concrete areas.
2. Removing the corroded reinforcement up to the sound layer.
3. Cleaning the reinforcement of rust.
4. Protecting the reinforcement with a primer coat.
5. Filling the voids with mortar.
6. Applying the protective layer.
7. Finishing the surface.

1. Identificarea si indepartarea betonului alterat.
2. Pregatirea si indepartarea armaturii corodate pana la stratul sanatos.
3. Curatirea armaturii de rugina.
4. Protejarea armaturii cu un strat de grund.
5. Umplerea golurilor cu mortar.
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3. Curatirea armaturii de rugina.
4. Protejarea armaturii cu un strat de grund.
5. Umplerea golurilor cu mortar.
6. Aplicarea stratului de protectie.
7. Finisarea suprafetei.

NOTA:
In situatia in care pentru suprafetele cu zone afectate de coroziune armaturile existente prezinta o reducere a sectiunii cu mai mult de 15% din diametrul initial, se va prevedea inlocuirea sau suplimentarea armaturii cu bare noi, cu aceeasi calitate a otelului ca si cea initial prin sudura sau prin petrecere pe lungime, cu o suprapunere de minimum 10 diametre.

NOTE:
In case on concrete or plaster surfaces affected by corrosion the existing reinforcement bars are presenting a reduction of the section with more than 15% of the initial diameter, the bars will be replaced or supplemented with new bars, with the same steel quality as the initial one, by welding or by overlapping on a length of minimum 10 diameters.

NOTA:
1. Toate cu ce privesc executia lucrarilor vor fi conform cu prevederile Normativului pentru executarea lucrarilor de reparatii, consolidari si modernizari a constructiilor din beton, beton armat si beton precomprimat, Partea I: Executarea lucrarilor de reparatii, indicativ NE 035-2007, si "Instructiuni tehnice privind executarea si controlul lucrarilor de reparatii, consolidare si protectie la constructiile din beton, beton armat si beton precomprimat" indicativ C56-85, si a Codului de practica pentru executarea lucrarilor de reparatii consolidari si protectii la constructii din beton, beton armat si beton precomprimat.
2. Beton si betoane pentru cel mai mediu expozitiunea betonului dalei poate fi cuprins intre clasele de expunere XC4 si XF1 conform prevederilor pentru elementele prefabricate.

NOTE:
1. Works are to strictly executed the provision from "Practical code for the execution concrete repairs, consolidations and modernizations of concrete structures, reinforced concrete and prestressed concrete", indicative NE035-2007 and "Technical works for the concrete protection and works, consolidation, reinforced and pre-stressed concrete, Part I: The execution of concrete works" - indicative C56-85, and the Technical Regulations of the execution of concrete repairs, indicative NE 035-2007, and "Technical instructions for quality checking and works execution for repairs, consolidation" C56-85, and "Technical Regulations of the execution of concrete repairs, consolidation and protection to concrete structures, reinforced concrete and prestressed concrete".
2. Concrete and mortars for concrete assembly superposition bone plate cracks to various exposure classes XC4 and XF1 may be between the provisions for precast elements.

NOTA:
1. Toate cele ce privesc executia lucrarilor vor fi conform cu prevederile Normativului pentru executarea lucrarilor de reparatii, consolidari si modernizari a constructiilor din beton, beton armat si beton precomprimat, Partea I: Executarea lucrarilor de reparatii, indicativ NE 035-2007, si "Instructiuni tehnice privind executarea si controlul lucrarilor de reparatii, consolidare si protectie la constructiile din beton, beton armat si beton precomprimat" indicativ C56-85, si a Codului de practica pentru executarea lucrarilor de reparatii consolidari si protectii la constructii din beton, beton armat si beton precomprimat.
2. Beton si betoane pentru cel mai mediu expozitiunea betonului dalei poate fi cuprins intre clasele de expunere XC4 si XF1 conform prevederilor pentru elementele prefabricate.

7					
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3	Modific.	Modific.			
Rev.	Actiune	Modificari	Elaborat	Verificat	Aprobat
Rev.	Action	Modifications	Elaborated	Checked	Approved

GUVERNUL ROMANIEI / ROMANIAN GOVERNMENT

PROIECT FINANTAT DE UNIUNEA EUROPEANA / EUROPEAN UNION FINANCED PROJECT

C.N.C.F. "C.F.R." - S.A.

CLIENT / CLIENT

CONSILIANT / CONSULTANT

			Data / Date	Semnatura / Signature
Asistent / Assistant	Ing. Mihaela Ciobanu			
Asistent / Assistant	Ing. Mihaela Ciobanu	R. Liuzzo		
Asistent / Assistant	Ing. Mihaela Ciobanu	C. Gorinelli		
Asistent / Assistant	Ing. Mihaela Ciobanu	V.Ballerstedt		

SUBCONTRACTANT / SUBCONTRACTOR

Asistent / Assistant	Ing. Mihaela Ciobanu	A. Ghidescu Stanciu	10.2011	
Asistent / Assistant	Ing. Mihaela Ciobanu	Ioan Rentea	10.2011	

Reabilitarea liniei de cale ferata Brasov - Simeria, parte componenta a coridorului IV Pan European, pentru circulatia trenurilor cu viteza maxima de 160 km/h.
Sectiunea / Section: Brasov - Stighisoara
Reabilitation of the railway line Brasov - Simeria, component Part of the IV Pan-European Corridor, for the trains circulation with a speed maximum allowed of 160 km/h.
Sectiunea / Section: Brasov - Stighisoara

Proiect/Project: 2004/0130/R/P/RO

Faza / Phase: P.Th. / T.D.

Denumire desen / Drawing Title:

Pasaj Inferior / Lower Passage km 171+485.00

Remedierea defectelor de suprafata mare si adancime redusa la betoane
Reinrevull the defects of depth and small size in concrete

Cod/Num / Cod/Nr. System: Foaie / Sheet: 1 / 1 | Nr. / Nr.: 2005/197