KUNJ VIHAR CGHS LTD

BOQ REPORT

BLOCK -A

BOQ FOR CRACKED BEAMS BLOCK -A (3RD ,5TH ,10TH FLOOR)

WIDTH = 300 mm = 0.3 m
Length = 3.0 m
Total Area:

Area =3.0m×0.3m=0.9m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	0.9	m²	3	2.7
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	0.9	m²	3	2.7
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.0108	m³	3	0.0324
4	Curing and finishing of surface after repair	0.9	m²	3	2.7

Chicken Mesh Required:0.9 m² (For one beam)

Mortar Volume (approx.):

Volume=Area×Thickness=0.9m²×0.012m=0.0108m³ (For one beam)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES



BOQ FOR CRACKED ROOF BLOCK -A (10TH FLOOR)

WIDTH = 2000 mm = 2.0 m
Length = 2.0 m
Total Area:

Area =2.0m×2.0m=4.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	4	m²	1	4
2	Application of polymer modified mortar / rich cement mortar (avg. 10mm thick)	0.0108	m³	1	0.04
3	Curing and finishing of surface after repair	4	m²	1	4

Mortar Volume (approx.):

Volume=Area×Thickness=4.0m²×0.010m=0.0400m³

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED STRAIRCASE BLOCK -A

WIDTH = 1500 mm = 1.5 m

Length = 3.0 m

Total Area:

Area =1.5m×3.0m=4.5m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	4.5	m²	6	27
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	4.5	m²	6	27
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.054	m³	6	0.324
4	Curing and finishing of surface after repair	4.5	m²	6	27

Chicken Mesh Required:4.5 m² (For one stair)

Mortar Volume (approx.):

Volume=Area×Thickness=4.5m²×0.012m=0.054m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS


Latitude: 28.592387
Longitude: 77.035055
Elevation: 249.74 ±5.54 m
Accuracy: 100.0 m
Time: 18-07-2025 12:05
Powered by NvteCam


Latitude: 28.592677
Longitude: 77.035681
Elevation: 258.44 ±3.1 m
Accuracy: 22.97 m
Time: 18-07-2025 11:52
Powered by NvteCam


Latitude: 28.59272
Longitude: 77.035461
Elevation: 258.54 ±6.02 m
Accuracy: 28.38 m
Time: 18-07-2025 11:59
Powered by NvteCam


Latitude: 28.592682
Longitude: 77.035578
Elevation: 254.14 ±3.86 m
Accuracy: 8.371 m
Time: 18-07-2025 11:55
Powered by NvteCam


Latitude: 28.592415
Longitude: 77.034997
Elevation: 248.74 ±7.67 m
Accuracy: 100.0 m
Time: 18-07-2025 12:15
Powered by NvteCam


Latitude: 28.592
Longitude: 77.035481
Elevation: 249.74 ±5.54 m
Accuracy: 100.0 m
Time: 18-07-2025 12:05
Powered by NvteCam

BOQ FOR CRACKED STRAIRCASE BLOCK -A

WIDTH = 1000 mm = 1 m

Length = 3.0 m

Total Area:

Area =1m×3.0m=3m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	3	m²	2	6
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	3	m²	2	6
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.036	m³	2	0.072
4	Curing and finishing of surface after repair	3	m²	2	6

Chicken Mesh Required:3 m² (For one stair)

Mortar Volume (approx.):

Volume=Area×Thickness=3m²×0.012m=0.036m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

BOQ FOR CRACKED STRAIRCASE BLOCK -A

WIDTH = 300 mm = 0.3 m

Length = 3.0 m

Total Area:

Area =0.3m×3.0m=0.9m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	0.9	m²	1	0.9
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	0.9	m²	1	0.9
2	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.0108	m³	1	0.0108
3	Curing and finishing of surface after repair	0.9	m²	1	0.9

Chicken Mesh Required:0.9 m² (For one stair)

Mortar Volume (approx.):

Volume=Area×Thickness=0.9m²×0.012m=0.0108m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

Visual picture

BOQ FOR CRACKED STRAIRCASE WITH STEEL BLOCK -A

DATA (SLAB JACKETING)

Parameter	Value
AREA	1.0 × 6 m = 6 m²
BAR DIA	10MM
SPACING	100MM C/C
TOTAL PLATER THICKNESS	**20MM**

CALCULATE QUANTITY OF ADDITIONAL 10 MM BARS

Number of bars along 1.0**m length**

(1000/100)+1=11

Length of each bar =

6m

Total length of bars =

11x6=66m

Weight of 10 mm dia steel =

0.620kg/m.

Total steel = 66 × 0.62 = ~40.92 kg

Total steel+7% wastage = 44Kg

PLASTER / JACKETING VOLUME

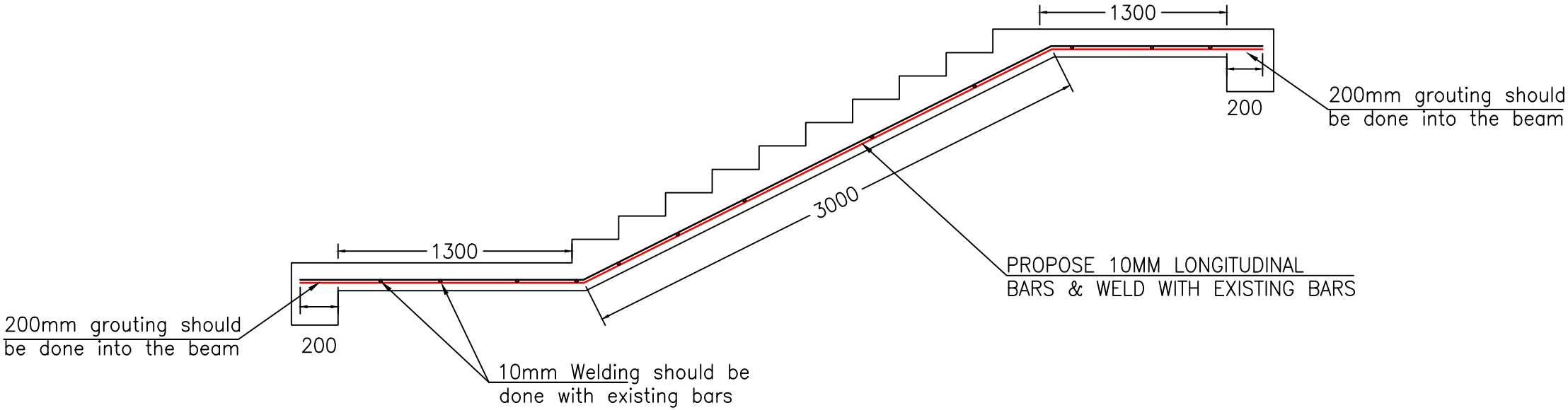
Total thickness = **20 mm = 0.02 m**

SO, **Volume = 6.0X0.02 = 0.12m³**

S. No	Description	Qty	Unit
1	Chiseling till sound concrete, extending min. 200 mm beyond corrosion	6	m²
2	Cleaning existing rebars and applying epoxy primer / corrosion inhibitor	6	m²
3	Welding additional 10 mm dia bars at 100 mm c/c	44	kg
4	Applying epoxy bonding agent	6	m²
5	Plastering with PMM or rich cement mortar (1:3), 20 mm thick	0.12	m³
6	Protective anti-carbonation / waterproof coating	6	m²

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

Visual picture


1300
200mm grouting should be done into the beam
200
3000
PROPOSE 10MM LONGITUDINAL BARS & WELD WITH EXISTING BARS
1300
200mm grouting should be done into the beam
200
10mm Welding should be done with existing bars

BOQ FOR CRACKS IN COLUMNS BLOCK-A

Column Details:

Column height: 3.0 meters

Width of each side = 0.3 m (300 mm)

Number of sides to be treated = 2 Chicken mesh to be applied on 2 sides

Crack repair on entire height, 2 Sides

Surface Area Calculation (for 2 sides):

We'll calculate the surface area for **all 2 sides** of one column:

Surface Area=Height×Width×Number of Sides = 3.0m×0.3m×2=1.8m²

Item No.	Description	Unit Quantity Unit		Number of columns	Total Quantity
1	Surface preparation: Chipping and cleaning of RCC column (4 sides)	1.8	m²	1	1.8
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	1.8	m²	1	1.8
3	Application of polymer modified mortar / rich cement mortar (12mm thick)	0.0216	m³	1	0.0216
4	Curing and finishing of surface after repair	1.8	m²	1	1.8

Chicken Mesh Required: 1.8 m² (for one column)

Mortar Volume (approx.):

Volume=Area×Thickness=1.8×0.012=0.0216m³ Cement (for one column)

& sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR CRACKS IN COLUMNS BLOCK-A

Column Details:

Column height: 3.0 meters

Width of each side = 0.3 m (300 mm)

Number of sides to be treated = 3

Chicken mesh to be applied on 3 sides

Crack repair on entire height, 3 Sides

Surface Area Calculation (for 3 sides):

We'll calculate the surface area for **all 3 sides** of one column:

Surface Area=Height×Width×Number of Sides = 3.0m×0.3m×3=2.7m²

Item No.	Description	Unit	Unit Quantity	Number of columns	Total Quantity
1	Surface preparation: Chipping and cleaning of RCC column (4 sides)	m²	2.7	1	2.7
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	m²	2.7	1	2.7
3	Application of polymer modified mortar / rich cement mortar (12mm thick)	m³	0.0324	1	0.0324
4	Curing and finishing of surface after repair	m²	2.7	1	2.7

Chicken Mesh Required: 2.7 m² (for one column)

Mortar Volume (approx.):

Volume=Area×Thickness=2.7×0.012=0.0324m³ (for one column)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- A

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	1.5 m
Sides to be treated	**3 sides (bottom + 2 verticals)**
Top face	**Remains intact (supports wall/ slab)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	1.8	m^2	9	16.2
2	Fixing chicken mesh (22 gauge, ½"x½") with nails & washers	1.8	m^2	9	16.2
3	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0216	m^3	9	0.1944
4	Curing and surface finishing after plastering	1.8	m^2	9	16.2

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

Side 1 (vertical): 0.45 × 1.5 = 0.675 m^2
Side 2 (bottom): 0.3 × 1.5 = 0.45 m^2
Side 3 (vertical): 0.45 × 1.5 = 0.675 m^2

Total Area: 0.675 + 0.45 + 0.675 = **1.8 m^2**

Mortar Volume (12 mm = 0.012 m thickness):

$$\text{Volume} = \text{Area} \times \text{Thickness} = 1.80 \times 0.012 = 0.0216\ m^3$$

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS


Latitude: 28.591779
Longitude: 77.036539
Elevation: 248.74±6.04 m
Accuracy: 14.19 m
Time: 18-07-2025 12:09


Latitude: 28.591668
Longitude: 77.035836
Elevation: 249.74±3.38 m
Accuracy: 100.0 m
Time: 18-07-2025 12:03
Note: Tower 06th floor kunj vihar 25


Latitude: 28.592411
Longitude: 77.035039
Elevation: 248.74±7.67 m
Accuracy: 100.0 m
Time: 18-07-2025 12:14
Note: Tower 02nd floor kunj vihar 35


Latitude: 28.591501
Longitude: 77.036665
Elevation: 249.74±5.54 m
Accuracy: 214.4 m
Time: 18-07-2025 12:04
Note: Tower 06th floor kunj vihar 28


Latitude: 28.592726
Longitude: 77.035676
Elevation: 248.74±7.04 m
Accuracy: 9.087 m
Time: 18-07-2025 11:59
Note: Tower 08th floor kunj vihar 19


Latitude: 28.592719
Longitude: 77.035671
Altitude: 206.4±3.89 m
Accuracy: 13.4 m
Time: 18-07-2025 11:56
Note: Tower 08th floor kunj vihar 16

BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- A

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	1.5 m
Sides to be treated	**2 sides (bottom + verticals)**
Top face	**Remains intact (supports wall/ slab)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	1.125	m^2	1	1.125
2	Fixing chicken mesh (22 gauge, ½"x½") with nails & washers	1.125	m^2	1	1.125
3	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0135	m^3	1	0.0135
4	Curing and surface finishing after plastering	1.125	m^2	1	1.125

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

Side 1 (vertical): 0.45 × 1.5 = 0.675 m^2
Side 2 (bottom): 0.3 × 1.5 = 0.45 m^2
Total Area: 0.675 + 0.45 = **1.125 m^2**

Mortar Volume (12 mm = 0.012 m thickness):
Volume=AreaxThickness=1.125x0.012=0.0135 m^3

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR PASSAGE AREA CRACKED

Height = 300 mm = 0.3 m

Length = 6.0 m

Work is to be done on **both sides**

Total Area:

Area (one side)=6.0m×0.3m=1.8m²
Area (both sides)=1.8m2×2=3.6m²

Item No.	Description	Unit Quantity	Unit	Numbers	Number of building	Total Quantity
1	Surface preparation: Chipping and cleaning cracked RCC wall (both sides)	3.6	m²	4	1	14.4
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	3.6	m²	4	1	14.4
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.0432	m³	4	1	0.1728
4	Curing and finishing of surface after repair	3.6	m²	4	1	14.4

Chicken Mesh Required: 3.6 m² (for one passage)

Mortar Volume (approx.):

Volume=Area×Thickness=3.6m2×0.012m=0.0432m3 (for one passage)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS


Latitude: 28.592832
Longitude: 77.035609
Elevation: 258.64±9.37 m
Accuracy: 16.85 m
Time: 18-07-2025 11:52
Note: Tower8 9th flvor kunj vihar 13
Powered by NoteCam


Latitude: 28.592705
Longitude: 77.035655
Elevation: 252.14±2.75 m
Accuracy: 9.08 m
Time: 18-07-2025 12:00
Note: Tower 07th flvor kunj vihar 21
Powered by NoteCam


Latitude: 28.592828
Longitude: 77.03556
Elevation: 248.74±7.67 m
Accuracy: 96.96 m
Time: 18-07-2025 12:12
Note: Tower 03rd flvor kunj vihar 34
Powered by NoteCam


Latitude: 28.59338
Longitude: 77.033958
Elevation: 248.74±7.67 m
Accuracy: 700.0 m
Time: 18-07-2025 12:14
Note: Tower 02nd flvor kunj vihar 36
Powered by NoteCam


Latitude: 28.592832
Longitude: 77.035609
Elevation: 258.64±9.37 m
Accuracy: 16.85 m
Time: 18-07-2025 11:52
Note: Tower8 9th flvor kunj vihar 13
Powered by NoteCam


Latitude: 28.592705
Longitude: 77.035655
Elevation: 252.14±2.75 m
Accuracy: 9.08 m
Time: 18-07-2025 12:00
Note: Tower 07th flvor kunj vihar 21
Powered by NoteCam

BOQ FOR PASSAGE AREA CRACKED (CEILING)

Width =500 mm = 0.5 m

Length = 6.0 m

Work is to be done on **both sides**

Total Area:

Area (one side)=6.0m×0.5m=3.0m²
Area (both sides)=3m²×2=6.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked RCC wall (both sides)	6	m²	4	24
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	6	m²	4	24
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.072	m³	4	0.288
4	Curing and finishing of surface after repair	6	m²	4	24

Chicken Mesh Required: 6 m² (for one passage roof both sides)

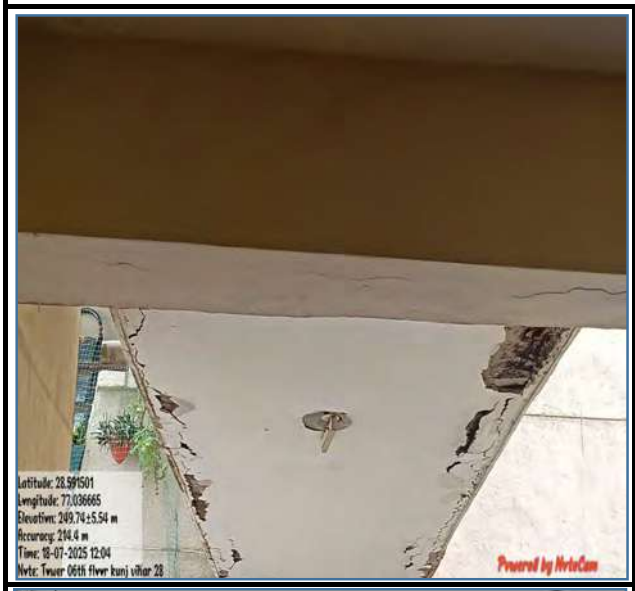
Mortar Volume (approx.):

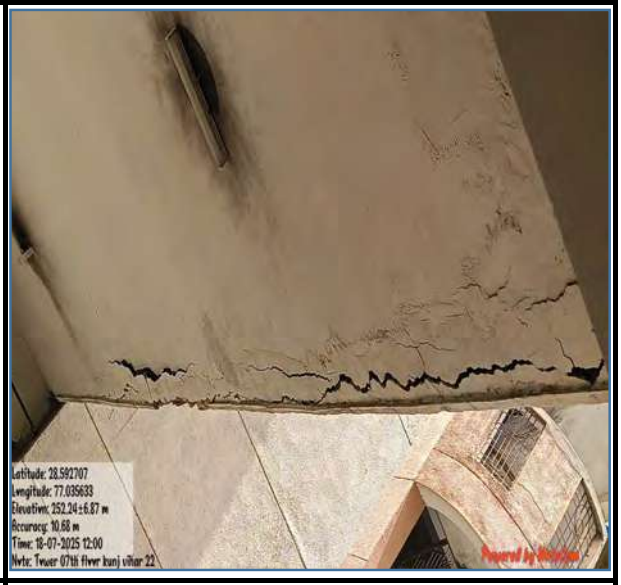
Volume=Area×Thickness=6.0m²×0.012m=0.072m3 (for one passage roof both sides)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

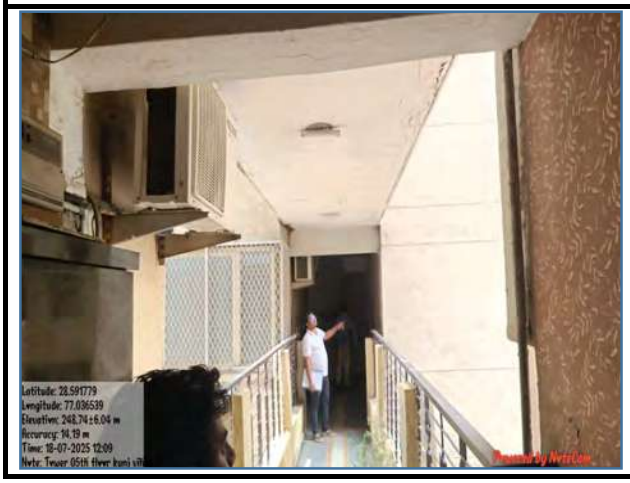
SNAPS

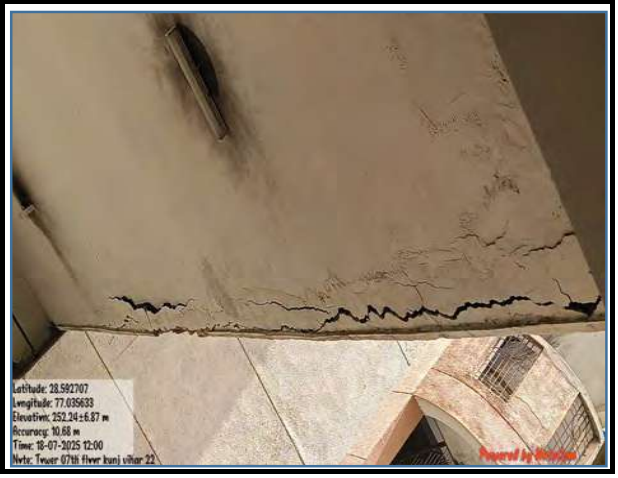

Latitude: 28.591501
Longitude: 77.036665
Elevation: 249.74±5.54 m
Accuracy: 214.4 m
Time: 18-07-2025 12:04
Note: Tower 06th flwr kunj vihar 28
Powered by NoteCam


Latitude: 28.592707
Longitude: 77.035633
Elevation: 252.24±6.87 m
Accuracy: 10.68 m
Time: 18-07-2025 12:00
Note: Tower 07th flwr kunj vihar 22


Latitude: 28.591747
Longitude: 77.03583
Elevation: 249.74±3.38 m
Accuracy: 100.0 m
Time: 18-07-2025 12:04
Note: Tower 06th flwr kunj vihar 27
Powered by NoteCam


Latitude: 28.591501
Longitude: 77.036665
Elevation: 249.74±5.54 m
Accuracy: 214.4 m
Time: 18-07-2025 12:04
Note: Tower 06th flwr kunj vihar 28
Powered by NoteCam


Latitude: 28.591779
Longitude: 77.036539
Elevation: 248.74±6.04 m
Accuracy: 14.19 m
Time: 18-07-2025 12:09
Note: Tower 05th flwr kunj vih
Powered by NoteCam


Latitude: 28.592707
Longitude: 77.035633
Elevation: 252.24±6.87 m
Accuracy: 10.68 m
Time: 18-07-2025 12:00
Note: Tower 07th flwr kunj vihar 22
Powered by NoteCam

BOQ FOR WALL CRACK STRENGTHENING (PLASTER)

DETAILED CALCULATIONS

1- Treatment Area (H × W)= 2.0 m × 2.5 m = 5.0 m²

Volume of Mortar Required

Volume=Area×Thickness=5.0m²×0.012m=0.06m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	5	m²	2	10
2	Application of rich cement mortar (12 mm thick)	0.06	m³	2	0.12
3	Curing and finishing after mortar application	5	m²	2	10

2- Treatment Area (H × W)= 3.0 m × 3.0 m = 9.0 m²

Volume of Mortar Required

Volume=Area×Thickness=9.0m²×0.012m=0.108m³

1	Surface preparation (cleaning and chiseling the cracked wall surface)	9	m²	1	9
2	Application of rich cement mortar (12 mm thick)	0.108	m³	1	0.108
3	Curing and finishing after mortar application	9	m²	1	9

3- Treatment Area (H × W)= 2.0 m × 3.0 m = 6.0 m²

Volume of Mortar Required

Volume=Area×Thickness=6.0m²×0.012m=0.072m³

S. No	Description	Qty	Unit	Number	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	6	m²	1	6
2	Application of rich cement mortar (12 mm thick)	0.072	m³	1	0.072
3	Curing and finishing after mortar application	6	m²	1	6

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR WALL CRACK STRENGTHENING

DETAILED CALCULATIONS

4- Treatment Area (H × W)= 2.0 m × 1.0m = 2.0 m²

Volume of Mortar Required

Volume=Area×Thickness=2.0m²×0.012m=0.024m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	2	m²	1	2
2	Application of rich cement mortar (12 mm thick)	0.024	m³	1	0.024
3	Curing and finishing after mortar application	2	m²	1	2

5- Treatment Area (H × W)= 2.0 m ×1.5 m = 3m²

Volume of Mortar Required

Volume=Area×Thickness=3.0m²×0.012m=0.036m³

1	Surface preparation (cleaning and chiseling the cracked wall surface)	2	m²	1	2
2	Application of rich cement mortar (12 mm thick)	0.036	m³	1	0.036
3	Curing and finishing after mortar application	2	m²	1	2

6- Treatment Area (H × W)= 0.45 m × 1.0 m = 0.45 m²

Volume of Mortar Required

Volume=Area×Thickness=0.45m²×0.012m=0.0054m³

S. No	Description	Qty	Unit	Number	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	0.45	m²	1	0.45
2	Application of rich cement mortar (12 mm thick)	0.0054	m³	1	0.0054
3	Curing and finishing after mortar application	0.45	m²	1	0.45

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR WALL CRACK STRENGTHENING (Miscellaneous)

DETAILED CALCULATIONS

Treatment Area (H × W)= 1.0 m × 1.0m = 1.0 m²

Volume of Mortar Required

Volume=Area×Thickness=1.0m²×0.012m=0.012m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	1	m²	10	10
2	Application of rich cement mortar (12 mm thick)	0.012	m³	10	0.12
3	Curing and finishing after mortar application	1	m²	10	10

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAP

KUNJ VIHAR CGHS LTD

BOQ REPORT

BLOCK -B

BOQ FOR CRACKED CEILING BLOCK -B

WIDTH = 1000 mm = 1.0 m
Length = 1.5 m
Total Area:

Area =1.0m×1.5m=1.5m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	1.5	m²	2	3
2	Application of polymer modified mortar / rich cement mortar (avg. 10mm thick)	0.015	m³	2	0.03
3	Curing and finishing of surface after repair	1.5	m²	2	3

Mortar Volume (approx.):

Volume=Area×Thickness=1.5m²×0.010m=0.0150m³ (for one slab)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED CEILING BLOCK -B

WIDTH = 1500 mm = 1.5 m
Length = 2.0 m
Total Area:

Area =2.0m×1.5m=3.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	3	m²	2	6
2	Application of polymer modified mortar / rich cement mortar (avg. 10mm thick)	0.03	m³	2	0.06
3	Curing and finishing of surface after repair	3	m²	2	6

Mortar Volume (approx.):

Volume=Area×Thickness=3.0m²×0.010m=0.030m³ (for one slab)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED STRAIRCASE BLOCK -B

WIDTH = 1500 mm = 1.5 m

Length = 3.0 m

Total Area:

Area =1.5m×3.0m=4.5m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	4.5	m²	5	22.5
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	4.5	m²	5	22.5
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.054	m³	5	0.27
4	Curing and finishing of surface after repair	4.5	m²	5	22.5

Chicken Mesh Required:4.5 m² (For one stair)

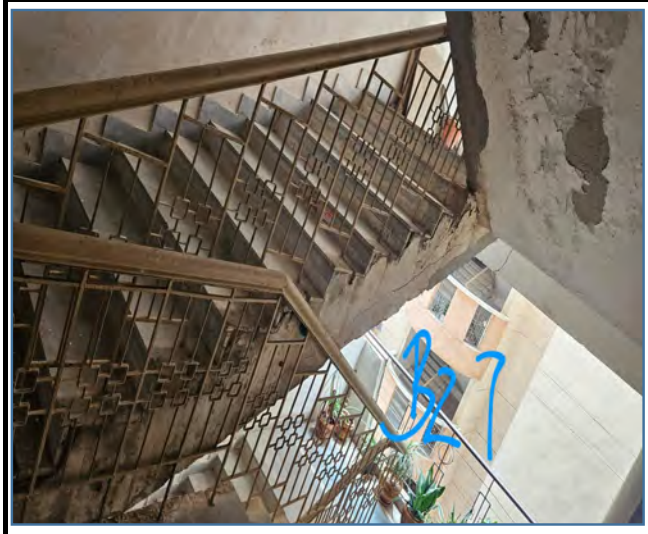
Mortar Volume (approx.):

Volume=Area×Thickness=4.5m²×0.012m=0.054m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS



BOQ FOR CRACKED STRAIRCASE BLOCK -B

WIDTH = 1000 mm = 1 m

Length = 3.0 m

Total Area:

Area =1m×3.0m=3m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	3	m²	9	27
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	3	m²	9	27
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.036	m³	9	0.324
4	Curing and finishing of surface after repair	3	m²	9	27

Chicken Mesh Required:3 m² (For one stair)

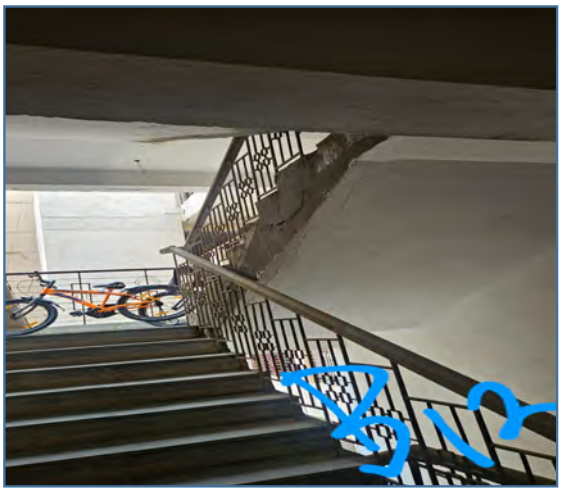
Mortar Volume (approx.):

Volume=Area×Thickness=3m²×0.012m=0.036m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS



BOQ FOR CRACKED STRAIRCASE BLOCK -B WIDTH

= 1500 mm = 1.5 m

Length = 3.0 m

Total Area:

Area =1.5m×3.0m=4.5m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	4.5	m²	1	4.5
2	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.054	m³	1	0.054
3	Curing and finishing of surface after repair	4.5	m²	1	4.5

Mortar Volume (approx.):

Volume=Area×Thickness=4.5m²×0.012m=0.054m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs. ***PROCEDURE***

SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

BOQ FOR CRACKED STRAIRCASE WITH STEEL BLOCK -B

DATA (SLAB JACKETING)

Parameter	Value
AREA	1.0 × 6 m = 6 m²
BAR DIA	10MM
SPACING	100MM C/C
TOTAL PLATER THICKNESS	**20MM**

CALCULATE QUANTITY OF ADDITIONAL 10 MM BARS

Number of bars along 1.0**m length**

(1000/100)+1=11

Length of each bar =

6m

Total length of bars =

11x6=66m

Weight of 10 mm dia steel =

0.620kg/m.

Total steel = 66 × 0.62 = ~40.92 kg

Total steel+7% wastage = 44Kg

PLASTER / JACKETING VOLUME

Total thickness = **20 mm = 0.02 m**

SO, **Volume = 6.0X0.02 = 0.12m³**

S. No	Description	Qty	Unit	Numbers	Total Qty
1	Chiseling till sound concrete, extending min. 200 mm beyond corrosion	6	m²	2	12
2	Cleaning existing rebars and applying epoxy primer / corrosion inhibitor	6	m²	2	12
3	Welding additional 10 mm dia bars at 100 mm c/c both ways	44	kg	2	88
4	Applying epoxy bonding agent	6	m²	2	12
5	Plastering with PMM or rich cement mortar (1:3), 20 mm thick	0.12	m³	2	0.24
6	Protective anti-carbonation / waterproof coating	6	m²	2	12

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 114-115 OF THE REPORT

Visual picture

BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- B

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	1.5 m
Sides to be treated	**3 sides (bottom + 2 verticals)**
Top face	**Remains intact (supports wall/ slab)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	1.8	m^2	13	23.4
2	Fixing chicken mesh (22 gauge, ½"x½") with nails & washers	1.8	m^2	13	23.4
3	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0216	m^3	13	0.28
4	Curing and surface finishing after plastering	1.8	m^2	13	23.4

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

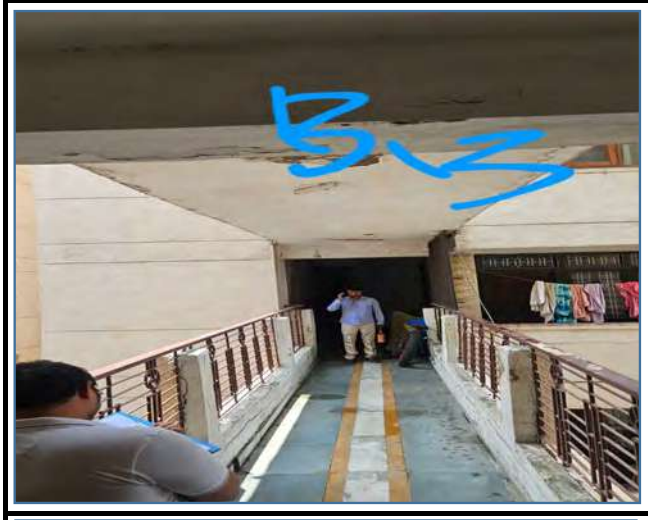
Side 1 (vertical): 0.45 × 1.5 = 0.675 m^2
Side 2 (bottom): 0.3 × 1.5 = 0.45 m^2
Side 3 (vertical): 0.45 × 1.5 = 0.675 m^2

Total Area: 0.675 + 0.45 + 0.675 = **1.8 m^2**
Mortar Volume (12 mm = 0.012 m thickness):
Volume=AreaxThickness=1.80x0.012=0.0216 m^3

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

PICTURES

SNAPS



BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- B

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	1.0 m
Sides to be treated	**3 sides (bottom + 2 verticals)**
Top face	**Remains intact (supports wall/ slab)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	1.8	m²	2	3.6
2	Fixing chicken mesh (22 gauge, ½"x½") with nails & washers	1.8	m²	2	3.6
3	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0216	m³	2	0.0432
4	Curing and surface finishing after plastering	1.8	m²	2	3.6

CALCULATION DETAILS:

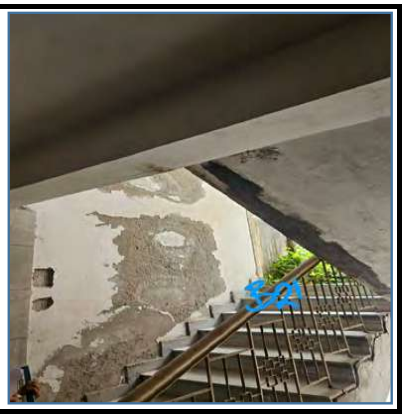
Surface Area for Chicken Mesh & Plaster: (for one beam)

Side 1 (vertical): 0.45 × 1.0 = 0.45 m²
Side 2 (bottom): 0.3 × 1.0 = 0.30 m²
Side 3 (vertical): 0.45 × 1.0 = 0.45 m²

Total Area: 0.45 + 0.30 + 0.45 = **1.2 m²**
Mortar Volume (12 mm = 0.012 m thickness):
Volume=AreaxThickness=1.20x0.012=0.0144 m³

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

PICTURES



BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- B BEAM

DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	2.0 m
Sides to be treated	**1side (bottom only)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	0.6	m^2	1	0.6
2	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0072	m^3	1	0.0072
3	Curing and surface finishing after plastering	0.6	m^2	1	0.6

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

(bottom): 0.3 × 2.0 = 0.6 m^2

Total Area: = 0.60 m^2

Mortar Volume (12 mm = 0.012 m thickness):

Volume=AreaxThickness=0.6x0.012=0.0072 m^3

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OFTHE REPORT

SNAPS

BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- B BEAM

DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	3.0 m
Sides to be treated	**1side (bottom only)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	0.9	m^2	1	0.9
2	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0108	m^3	1	0.0108
3	Curing and surface finishing after plastering	0.9	m^2	1	0.9

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

(bottom): $0.3 \times 3.0 = 0.9\ m^2$

Total Area: = 0.90 m^2

Mortar Volume (12 mm = 0.012 m thickness):

Volume=AreaxThickness=0.9x0.012=0.0108 m^3

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR MAJOR CRACKS IN BEAMS

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300X450MM
Length	1.5m
Sides to be treated	**3 sides (bottom + two vertical sides)**
Top face	**Remains intact (supports wall/ slab)**

STRENGTHENING DETAILS

S. No	Item Description	Qty	Unit	number	total Qty
1	Surface preparation & chiseling (3 sides)	1.8	m^2	1	1.8
2	12 mm dia bars welded (3 bars × 1.5 m = 4.5 m)	4.6	m^2	1	4.6
3	8 mm U-type stirrups @150 mm c/c (11 Nos, 1.248 m each)	5.35	kg	1	5.35
4	Plastering with rich mortar/polymer (20 mm thick on 3 sides)	0.036	m^3	1	0.036
5	Surface curing and finishing after plastering	1.8	m^2	1	1.8

CALCULATION DETAILS

Surface Area for Plaster (3 sides of beam):

Side 1 (vertical): 0.45 × 1.5 = 0.675 m^2
Side 2 (bottom): 0.3 × 1.5 = 0.45 m^2
Side 3 (vertical): 0.45 × 1.5 = 0.675 m^2

Total Area: 0.675 + 0.45 + 0.675 = **1.8 m^2**

Volume of Plaster:

Volume = 1.8 × 0.02 = **0.036 m^3**

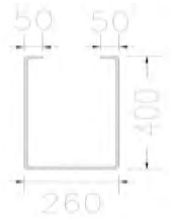
12 mm Bars Weight:

3 bars × 1.5 m+(0.3M) = 4.8 m
Weight = 0.888 kg/m × 4.8 m = **~4.26 kg**

(150MM INSERT IN BEAMS)
Total weight +7% wastage=4.6kg

8 mm Stirrup Weight (U-type):

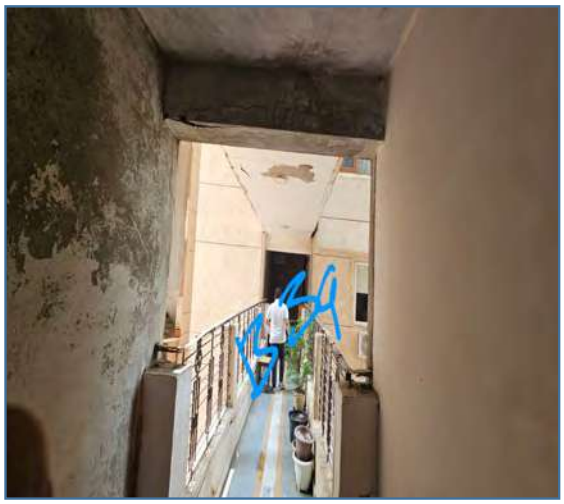
Each stirrup = 1.16 m



No. of stirrups = 11
Total length = 12.76 m
Weight = 12.76 × 0.395 = **5.0 kg**

Total weight +7% wastage=5.35kg

PROCEDURE SHOULD BE FOLLWED ACCORDING PAGE 93-100 OF OF THE REPORT

SNAPS	
	

BOQ FOR CRACKED PASSAGE AREA

Height = 300 mm = 0.3 m
Length = 6.0 m
Work is to be done on **both sides**
Total Area:

Area (one side)=6.0m×0.3m=1.8m²
Area (both sides)=1.8m2×2=3.6m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked RCC wall (both sides)	3.6	m²	7	25.2
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	3.6	m²	7	25.2
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.0432	m³	7	0.3024
4	Curing and finishing of surface after repair	3.6	m²	7	25.2

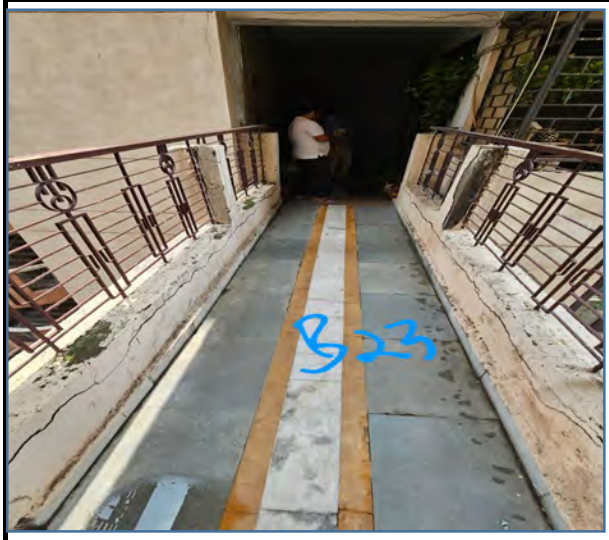
Chicken Mesh Required: 3.6 m² (for one passage both side)
Mortar Volume (approx.):

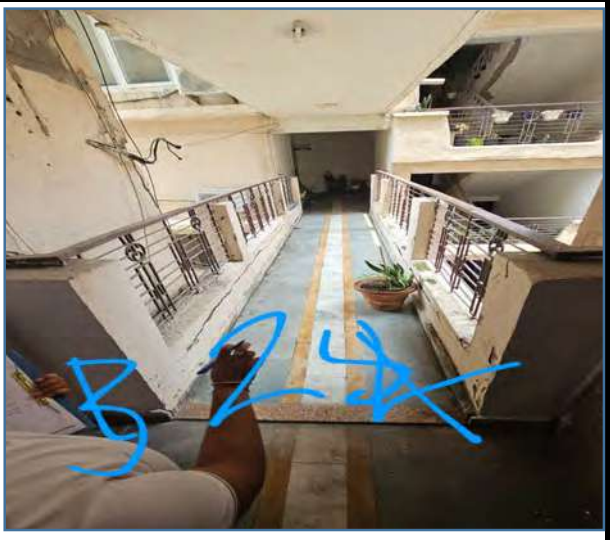
Volume=Area×Thickness=3.6m2×0.012m=0.0432m³ (for one passage both side)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS





BOQ FOR PASSAGE AREA CRACKED (CEILING)

Width =500 mm = 0.5 m Length = 6.0 m
Work is to be done on **both sides**
Total Area:

Area (one side)=6.0m×0.5m=3.0m²
Area (both sides)=3m²×2=6.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked RCC wall (both sides)	6	m²	7	42
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	6	m²	7	42
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.072	m³	7	0.504
4	Curing and finishing of surface after repair	6	m²	7	42

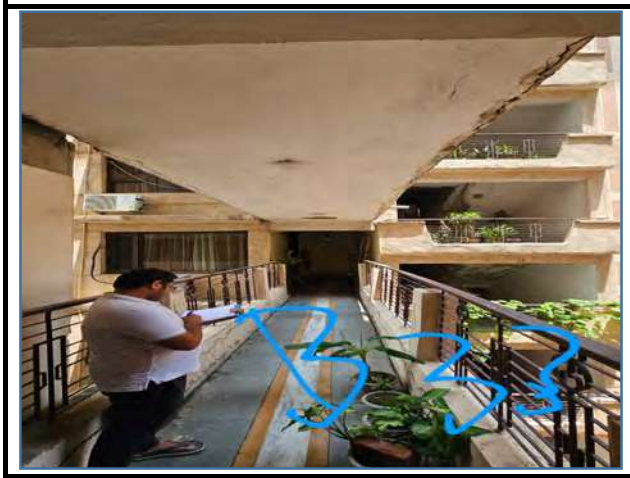
Chicken Mesh Required: 6 m² (for one passage roof both sides)
Mortar Volume (approx.):

Volume=Area×Thickness=6.0m²×0.012m=0.072m3 (for one passage roof both sides)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS



BOQ FOR PASSAGE AREA CRACKED (CEILING)

Width =1000 mm = 1.0 m Length
= 1.5 m
Work is to be done on **both sides**
Total Area:

Area (one side)=1.0m×1.5m=1.5m²
Area (both sides)=1.5m²×2=3.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked RCC wall (both sides)	3	m²	1	3
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	3	m²	1	3
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.036	m³	1	0.036
4	Curing and finishing of surface after repair	3	m²	1	3

Chicken Mesh Required: 3 m² (for one passage roof both sides)
Mortar Volume (approx.):

Volume=Area×Thickness=3.0m²×0.012m=0.036m3 (for one passage roof both sides)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR WALL CRACK STRENGTHENING (PLASTER)

DETAILED CALCULATIONS

1- **Treatment Area (H × W)= 2.0 m × 1.5 m = 3.0 m²**

Volume of Mortar Required

Volume=Area×Thickness=3.0m²×0.012m=0.036m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	3	m²	1	3
2	Application of rich cement mortar (12 mm thick)	0.036	m³	1	0.036
3	Curing and finishing after mortar application	3	m²	1	3

2- **Treatment Area (H × W)= 2.5 m × 1.5 m = 3.75 m²**

Volume of Mortar Required

Volume=Area×Thickness=3.75m²×0.012m=0.045m³

1	Surface preparation (cleaning and chiseling the cracked wall surface)	3.75	m²	1	3.75
2	Application of rich cement mortar (12 mm thick)	0.045	m³	1	0.045
3	Curing and finishing after mortar application	3.75	m²	1	3.75

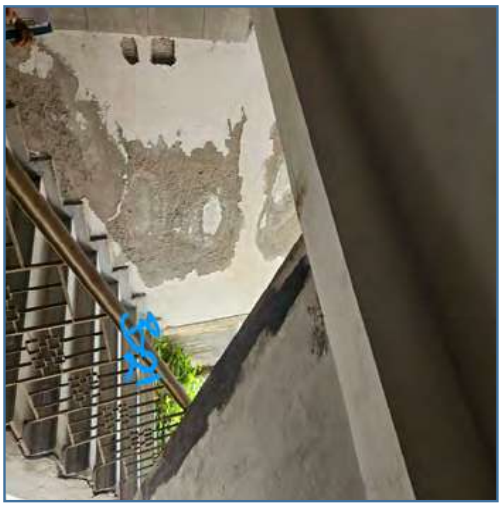
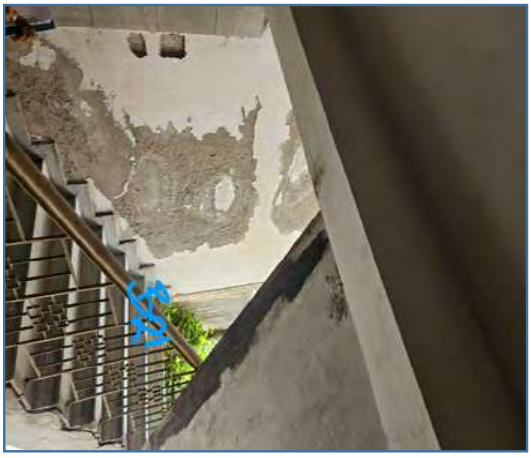
3- **Treatment Area (H × W)= 1.0 m × 0.5 m = 0.5 m²**

Volume of Mortar Required

Volume=Area×Thickness=0.5m²×0.012m=0.006m³

S. No	Description	Qty	Unit	Number	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	0.5	m²	1	0.5
2	Application of rich cement mortar (12 mm thick)	0.006	m³	1	0.006
3	Curing and finishing after mortar application	0.5	m²	1	0.5

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS		
		
		
		

BOQ FOR BALCONY WALL CRACK STRENGTHENING

DETAILED CALCULATIONS

Treatment Area (H × W)= 3.0 m × 1.5m = 4.5 m^2

Volume of Mortar Required

Volume=Area×Thickness=4.5m^2×0.012m=0.054m^3

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	4.5	m^2	1	4.5
2	Application of rich cement mortar (12 mm thick)	0.054	m^3	1	0.054
3	Curing and finishing after mortar application	4.5	m^2	1	4.5

BOQ FOR WALL CRACK STRENGTHENING

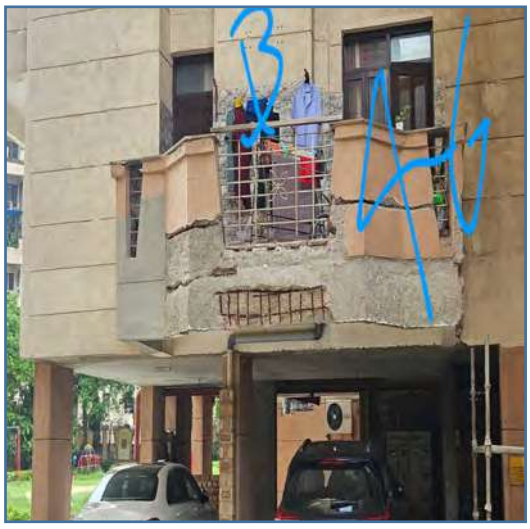
DETAILED CALCULATIONS

Treatment Area (H × W)= 1.0 m × 0.5m = 0.5 m^2

Volume of Mortar Required

Volume=Area×Thickness=0.5m^2×0.012m=0.006m^3

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	0.5	m^2	5	2.5
2	Application of rich cement mortar (12 mm thick)	0.006	m^3	5	0.03
3	Curing and finishing after mortar application	0.5	m^2	5	2.5



PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

BOQ FOR WALL CRACK STRENGTHENING (Miscellaneous)

DETAILED CALCULATIONS

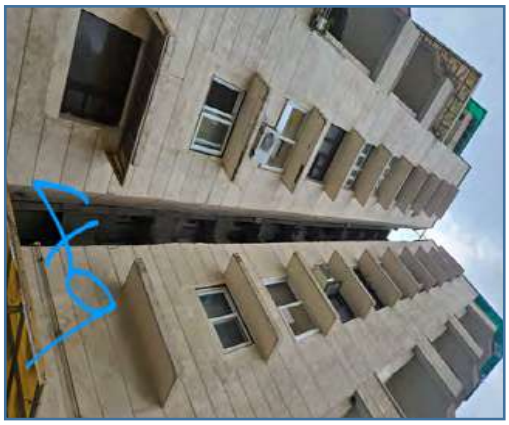
Treatment Area (H × W)= 1.0 m × 1.0m = 1.0 m²

Volume of Mortar Required

Volume=Area×Thickness=1.0m²×0.012m=0.012m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	1	m²	8	8
2	Application of rich cement mortar (12 mm thick)	0.012	m³	8	0.096
3	Curing and finishing after mortar application	1	m²	8	8

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAP
 
 

BOQ FOR WALL CRACK STRENGTHENING

DETAILED CALCULATIONS

Treatment Area (H × W)= 3.0 m × 0.3m = 0.9 m²

Volume of Mortar Required

Volume=Area×Thickness=0.9m²×0.012m=0.0108m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	0.9	m²	1	0.9
2	Application of rich cement mortar (12 mm thick)	0.0108	m³	1	0.0108
3	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	0.9	m²	1	0.9
4	Curing and finishing after mortar application	0.9	m²	1	0.9

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAP S


BOQ FOR CRACKED BALCONY STRENGTHENING

DETAILED CALCULATIONS

Treatment Area (H × W)= 3.0 m × 0.5m = 1.5 m^2

Volume of Mortar Required

Volume=Area×Thickness=1.5m^2×0.012m=0.018m^3

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	1.5	m^2	1	0.9
2	Application of rich cement mortar (12 mm thick)	0.018	m^3	1	0.0108
3	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	1.5	m^2	1	0.9
4	Curing and finishing after mortar application	1.5	m^2	1	0.9

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR CRACKED PROJECTION PART STRENGTHENING

DETAILED CALCULATIONS

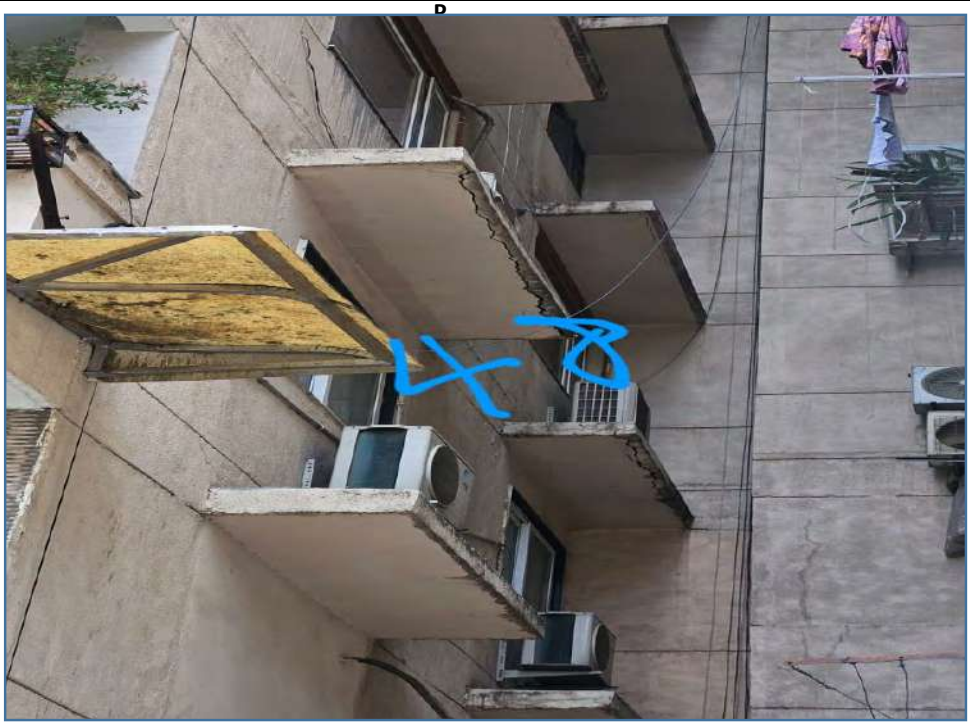
Treatment Area (H × W)= 2.0 m × 0.5m = 1.0 m²

Volume of Mortar Required

Volume=Area×Thickness=1.0m²×0.012m=0.012m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	1	m²	2	2
2	Application of rich cement mortar (12 mm thick)	0.012	m³	2	0.0108
3	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	1	m²	2	2
4	Curing and finishing after mortar application	1	m²	2	2

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAP


KUNJ VIHAR CGHS LTD

BOQ REPORT

BLOCK -C

BOQ FOR CRACKED BEAMS BLOCK -C

WIDTH = 300 mm = 0.3 m
Length = 3.0 m
Total Area:

Area =3.0m×0.3m=0.9m2

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	0.9	m^2	1	0.9
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	0.9	m^2	1	0.9
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.0108	m^3	1	0.0108
4	Curing and finishing of surface after repair	0.9	m^2	1	0.9

Chicken Mesh Required:0.9 m^2 (For one beam)

Mortar Volume (approx.):

Volume=Area×Thickness=0.9m^2×0.012m=0.0108m^3 (For one beam)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED CEILING BLOCK -C

WIDTH = 1000 mm = 1.0 m
Length = 1.5 m
Total Area:

Area =1.0m×1.5m=1.5m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	1.5	m²	2	3
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	1.5	m²	2	3
3	Application of polymer modified mortar / rich cement mortar (avg. 10mm thick)	0.015	m³	2	0.03
4	Curing and finishing of surface after repair	1.5	m²	2	3

Mortar Volume (approx.):

Volume=Area×Thickness=1.5m²×0.010m=0.015m³ (for one slab)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED CEILING BLOCK -C

WIDTH = 1000 mm = 1.0 m
Length = 1.5 m
Total Area:

Area =1.0m×1.5m=1.5m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	1.5	m²	1	1.5
2	Application of polymer modified mortar / rich cement mortar (avg. 10mm thick)	0.015	m³	1	0.015
3	Curing and finishing of surface after repair	1.5	m²	1	1.5

Mortar Volume (approx.):

Volume=Area×Thickness=1.5m²×0.010m=0.015m³ (for one slab)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED CEILING BLOCK -C

WIDTH = 1000 mm = 1.0 m
Length = 3.0 m
Total Area:

Area =1.0m×3.0m=3.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	3	m²	1	1.5
2	Application of polymer modified mortar / rich cement mortar (avg. 10mm thick)	0.03	m³	1	0.03
3	Curing and finishing of surface after repair	3	m²	1	1.5

Mortar Volume (approx.):

Volume=Area×Thickness=3.0m²×0.010m=0.030m³ (for one slab)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED STRAIRCASE BLOCK -c

WIDTH = 1500 mm = 1.5 m

Length = 3.0 m

Total Area:

Area =1.5m×3.0m=4.5m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	4.5	m²	3	13.5
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	4.5	m²	3	13.5
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.054	m³	3	0.162
4	Curing and finishing of surface after repair	4.5	m²	3	13.5

Chicken Mesh Required:4.5 m² (For one stair)

Mortar Volume (approx.):

Volume=Area×Thickness=4.5m²×0.012m=0.054m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR CRACKED STRAIRCASE BLOCK -C

WIDTH = 1000 mm = 1 m

Length = 3.0 m

Total Area:

Area =1m×3.0m=3m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	3	m²	12	36
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	3	m²	12	36
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.036	m³	12	0.432
4	Curing and finishing of surface after repair	3	m²	12	36

Chicken Mesh Required:3 m² (For one stair)

Mortar Volume (approx.):

Volume=Area×Thickness=3m²×0.012m=0.036m³ (For one stair)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF REPORT THE REPORT

SNAPS

SNAPS

BOQ FOR CRACKED STRAIRCASE WITH STEEL BLOCK -C

DATA (SLAB JACKETING)

Parameter	Value
AREA	1.5 × 6 m = 9 m²
BAR DIA	10MM
SPACING	100MM C/C
TOTAL PLATER THICKNESS	**20MM**

CALCULATE QUANTITY OF ADDITIONAL 10 MM BARS

Number of bars along 1.5**m length**

(1500/100)+1=16

Length of each bar =

6m

Total length of bars =

16x6=96m

Weight of 10 mm dia steel =

0.620kg/m.

Total steel = 96 × 0.62 = ~59.52 kg

Total steel+7% wastage = 64Kg

PLASTER / JACKETING VOLUME

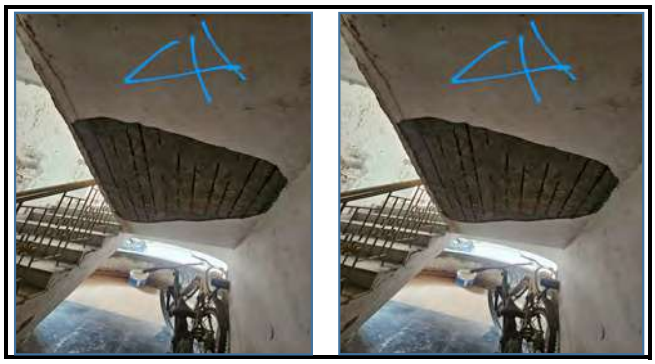
Total thickness = **20 mm = 0.02 m**

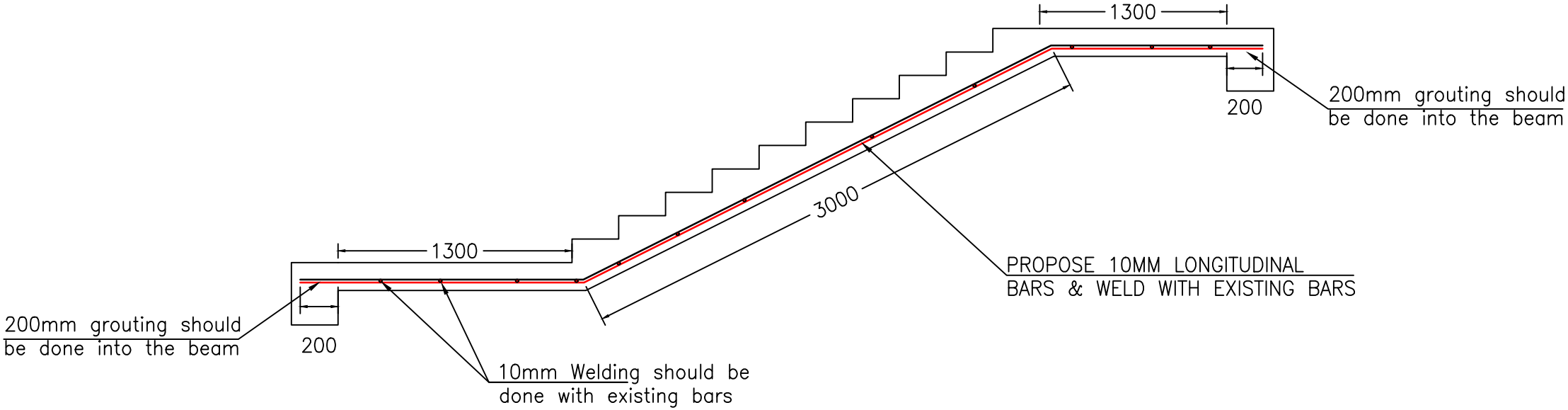
SO, **Volume = 9.0X0.02 = 0.18m³**

S. No	Description	Qty	Unit	Numbers	Total Qty
1	Chiseling till sound concrete, extending min. 200 mm beyond corrosion	9	m²	1	9
2	Cleaning existing rebars and applying epoxy primer / corrosion inhibitor	9	m²	1	9
3	Welding additional 10 mm dia bars at 100 mm c/c both ways	64	kg	1	64
4	Applying epoxy bonding agent	9	m²	1	9
5	Plastering with PMM or rich cement mortar (1:3), 20 mm thick	0.18	m³	1	0.18
6	Protective anti-carbonation / waterproof coating	9	m²	1	9

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

Visual picture




1300
200mm grouting should be done into the beam
200
3000
PROPOSE 10MM LONGITUDINAL BARS & WELD WITH EXISTING BARS
1300
200mm grouting should be done into the beam
200
10mm Welding should be done with existing bars

BOQ FOR CRACKED STRAIRCASE WITH STEEL BLOCK -C

DATA (SLAB JACKETING)

Parameter	Value
AREA	1.5 × 6 m = 9 m²
BAR DIA	10MM
SPACING	100MM C/C
TOTAL PLATER THICKNESS	**20MM**

CALCULATE QUANTITY OF ADDITIONAL 10 MM BARS

Number of bars along 1.5**m length**

(1500/100)+1=16

Length of each bar =

6m

Total length of bars =

16x6=96m

Weight of 10 mm dia steel =

0.620kg/m.

Total steel = 96 × 0.62 = ~59.52 kg

Total steel+7% wastage = 64Kg

PLASTER / JACKETING VOLUME

Total thickness = **20 mm = 0.02 m**

SO, **Volume = 9.0X0.02 = 0.18m³**

S. No	Description	Qty	Unit	Numbers	Total Qty
1	Chiseling till sound concrete, extending min. 200 mm beyond corrosion	9	m²	1	9
2	Cleaning existing rebars and applying epoxy primer / corrosion inhibitor	9	m²	1	9
3	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	9	m²	1	9
4	Welding additional 10 mm dia bars at 100 mm c/c both ways	64	kg	1	64
5	Applying epoxy bonding agent	9	m²	1	9
6	Plastering with PMM or rich cement mortar (1:3), 20 mm thick	0.18	m³	1	0.18
7	Protective anti-carbonation / waterproof coating	9	m²	1	9

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

Visual picture

BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- C

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	1.5 m
Sides to be treated	**3 sides (bottom + 2 verticals)**
Top face	**Remains intact (supports wall/ slab)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	1.8	m²	4	7.2
2	Fixing chicken mesh (22 gauge, ½"x½") with nails & washers	1.8	m²	4	7.2
3	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0216	m³	4	0.0864
4	Curing and surface finishing after plastering	1.8	m²	4	7.2

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

Side 1 (vertical): 0.45 × 1.5 = 0.675 m²
Side 2 (bottom): 0.3 × 1.5 = 0.45 m²
Side 3 (vertical): 0.45 × 1.5 = 0.675 m²

Total Area: 0.675 + 0.45 + 0.675 = **1.8 m²**
Mortar Volume (12 mm = 0.012 m thickness):
Volume=AreaxThickness=1.80x0.012=0.0216 m³

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS






BOQ FOR MODERATE CRACKS IN BEAMS BLOCK- C

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300 mm (W) × 450 mm (D)
Length	3.0 m
Sides to be treated	**3 sides (bottom + 2 verticals)**
Top face	**Remains intact (supports wall/ slab)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	3.6	m²	4	14.4
2	Fixing chicken mesh (22 gauge, ½"x½") with nails & washers	3.6	m²	4	14.4
3	Application of polymer modified/ rich cement mortar (12 mm thick)	0.0432	m³	4	0.1728
4	Curing and surface finishing after plastering	3.6	m²	4	14.4

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

Side 1 (vertical): 0.45 × 3.0 = 1.35 m²
Side 2 (bottom): 0.3 × 3.0 = 0.90 m²
Side 3 (vertical): 0.45 × 3.0 = 1.35 m²

Total Area: 1.35 + 0.90 + 1.35 = **3.6 m²**

Mortar Volume (12 mm = 0.012 m thickness):

Volume=AreaxThickness=3.60x0.012=0.0432 m³

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS

BOQ FOR MAJOR CRACKS IN BEAMS

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300X450MM
Length	1.5m
Sides to be treated	**3 sides (bottom + two vertical sides)**
Top face	**Remains intact (supports wall/ slab)**

STRENGTHENING DETAILS

S. No	Item Description	Qty	Unit	number	total Qty
1	Surface preparation & chiseling (3 sides)	1.8	m^2	8	14.4
2	12 mm dia bars welded (3 bars × 1.5 m = 4.5 m)	4.6	m^2	8	36.8
3	8 mm U-type stirrups @150 mm c/c (11 Nos, 1.248 m each)	5.35	kg	8	42.8
4	Plastering with rich mortar/polymer (20 mm thick on 3 sides)	0.036	m^3	8	0.288
5	Surface curing and finishing after plastering	1.8	m^2	8	14.4

CALCULATION DETAILS

Surface Area for Plaster (3 sides of beam):

Side 1 (vertical): 0.45 × 1.5 = 0.675 m^2
Side 2 (bottom): 0.3 × 1.5 = 0.45 m^2
Side 3 (vertical): 0.45 × 1.5 = 0.675 m^2

Total Area: 0.675 + 0.45 + 0.675 = **1.8 m^2**

Volume of Plaster:

Volume = 1.8 × 0.02 = **0.036 m^3**

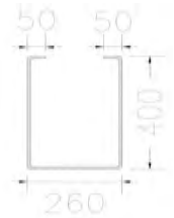
12 mm Bars Weight:

3 bars × 1.5 m+(0.3M) = 4.8 m
Weight = 0.888 kg/m × 4.8 m = **~4.26 kg**

(150MM INSERT IN BEAMS BOTH SIDE)
Total weight +7% wastage=4.6kg

8 mm Stirrup Weight (U-type):

Each stirrup = 1.16 m



No. of stirrups = 11
Total length = 12.76 m
Weight = 12.76 × 0.395 = **5.0 kg**

Total weight +7% wastage=5.35kg

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF REPORT

SNAPS

BOQ FOR PASSAGE AREA CRACKED

Height = 300 mm = 0.3 m
Length = 6.0 m
Work is to be done on **both sides**
Total Area:

Area (one side)=6.0m×0.3m=1.8m²
Area (both sides)=1.8m²×2=3.6m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked RCC wall (both sides)	3.6	m²	5	18
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	3.6	m²	5	18
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.0432	m³	5	0.216
4	Curing and finishing of surface after repair	3.6	m²	5	18

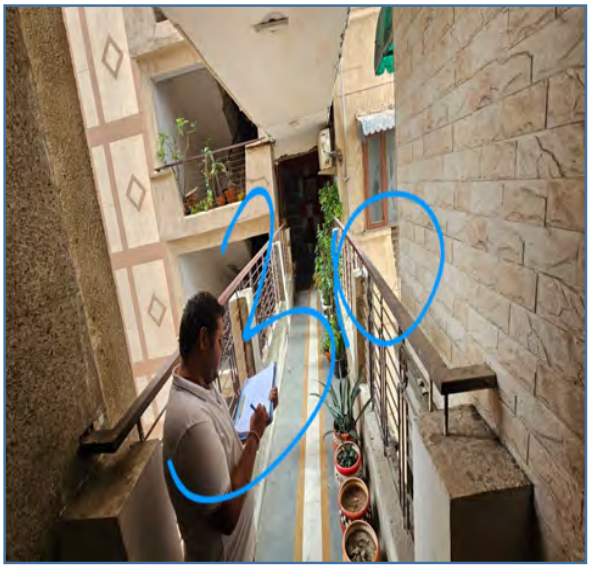
Chicken Mesh Required: 3.6 m² (for one passage both side)
Mortar Volume (approx.):

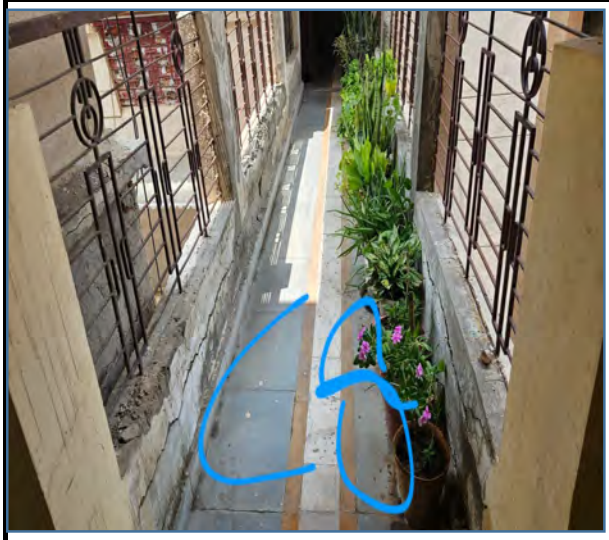
Volume=Area×Thickness=3.6m2×0.012m=0.0432m³ (for one passage both side)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS





BOQ FOR PASSAGE AREA CRACKED (CEILING)

Width =500 mm = 0.5 m
Length = 6.0 m
Work is to be done on **both sides**
Total Area:

Area (one side)=6.0m×0.5m=3.0m²
Area (both sides)=3m²×2=6.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked RCC wall (both sides)	6	m²	3	36
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	6	m²	3	36
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.072	m³	3	0.216
4	Curing and finishing of surface after repair	6	m²	3	36

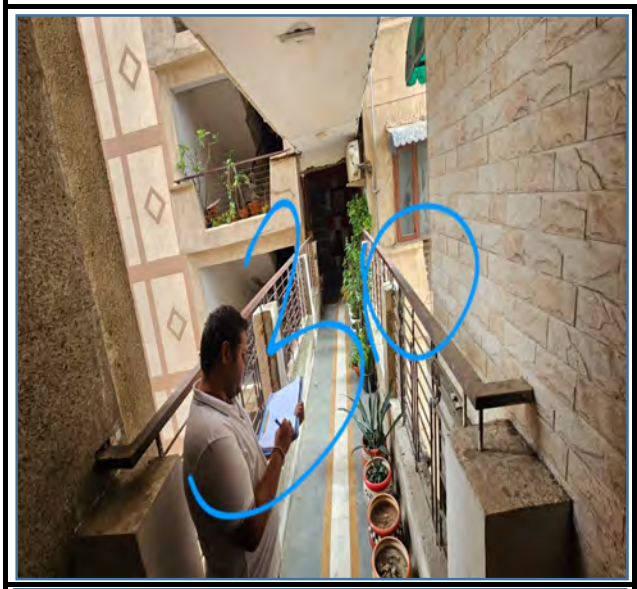
Chicken Mesh Required: 6 m² (for one passage roof both sides)
Mortar Volume (approx.):

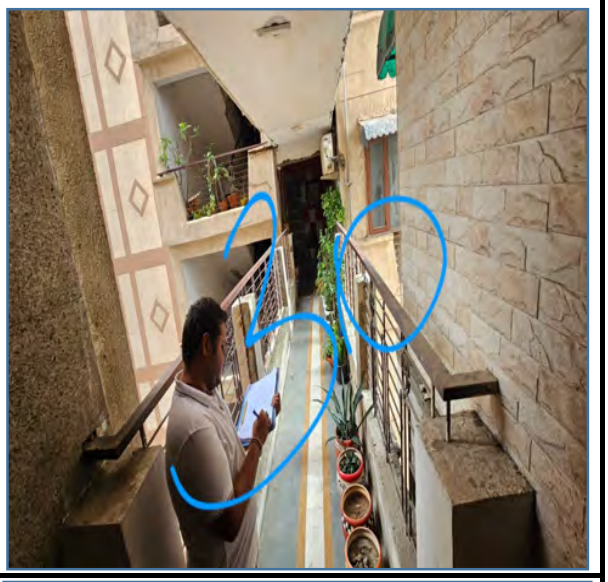
Volume=Area×Thickness=6.0m²×0.012m=0.072m3 (for one passage roof both sides)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS



BOQ FOR PASSAGE AREA CRACKED (CEILING)

Width =1500 mm = 1.5 m
Length = 6.0 m
Total Area: Area =1.5m×6.0m=9.0m²
Bar Length:

2 bars per side × 6.0 m = 12.0 m
Total Steel Required = 6.30 m × 4 bars = 25.20 Rmt = 25.2X0.395 =10Kg Each end anchoring: 150 mm × 2 ends = 0.3 m/bar → already included

Chicken Mesh Required: 9 m²

Mortar Volume (approx.):

Volume=Area×Thickness=9.0m²×0.020m=0.18m³

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
	Surface preparation: 1				
C	hipping & cleaning of	9	m²	1	9
2	Welding & fixing of 8 mm dia bars, 2 bars per side , with 150 mm anchoring at ends	25.2	Rmt	1	25.2 or (11kg)
3	Drilling and inserting anchor rods with Hilti chemical anchors (for 4 mm bars, both ends)	4	NO'S	1	4
	Supply & fixing of chicken mesh 4				
(2	2 gauge, ½" × ½") with nails	9	m²	1	9
5	Application of polymer modified mortar / rich cement mortar	0.18	m³	1	0.18
6	Curing and finishing of surface after repair	9	m²	1	9

Total Steel Required = 6.30 m × 4 bars = 25.20 Rmt = 25.2X0.395 =10Kg

(with 7% wastage =10.7kg)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR PROJECTION AREA CRACKED (CEILING)

Width =1000 mm = 1.0 m

Length = 2.0 m

Total Area: Area =1.0m×2.0m=2.0m²

CALCULATE QUANTITY OF ADDITIONAL 8 MM BARS

(1000/100)+1=11

Length of each bar = 2m

Total length of bars = 11x2=22m

Weight of 8 mm dia steel = 0.395kg/m.

Total steel = 22 × 0.395 = ~8.69 kg

Total steel+7% wastage = 9.2Kg

Mortar Volume (approx.):

Volume=Area×Thickness=2.0m²×0.020m=0.04m³

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping & cleaning of	2	m²	2	4
2	Welding & fixing of 8 mm dia bars	9.2	kg	2	18.4
3	Application of polymer modified mortar / rich cement mortar	0.04	m³	2	0.08
4	Curing and finishing of surface after repair	2	m²	2	4

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR PASSAGE AREA CRACKED CEILING

Width =500 mm = 0.5 m Length = 6.0 m
Work is to be done on **both sides**
Total Area:
Area (one side)=6.0m×0.5m=3.0m²
Area (both sides)=3m²×2=6.0m²

Bar Length:
2 bars per side × 6.0 m = 12.0 m
Total Steel Required = 6.30 m × 4 bars = 25.20 Rmt
Each end anchoring: 150 mm × 2 ends = 0.3 m/bar → already included

Chicken Mesh Required: 6 m²

Mortar Volume (approx.):
Volume=Area×Thickness=6.0m²×0.020m=0.12m³

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping & cleaning of	6	m²	1	6
2	Welding & fixing of 8 mm dia bars, 2 bars per side , with 150 mm anchoring at ends	25.2	Rmt	1	25.2
3	Drilling and inserting anchor rods with Hilti chemical anchors (for 4 mm bars, both ends)	4	NO'S	1	4
4	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails	6	m²	1	6
5	Application of polymer modified mortar / rich cement mortar	0.12	m³	1	0.12
6	Curing and finishing of surface after repair	6	m²	1	6

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR WALL CRACK STRENGTHENING (PLASTER)

DETAILED CALCULATIONS

1- **Treatment Area (H × W)= 2.0 m × 3.0 m = 6.0 m²**

Volume of Mortar Required

Volume=Area×Thickness=6.0m²×0.012m=0.072m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	6	m²	1	6
2	Application of rich cement mortar (12 mm thick)	0.072	m³	1	0.072
3	Curing and finishing after mortar application	6	m²	1	6

2- **Treatment Area (H × W)= 1.5 m × 0.5 m = 0.5 m²**

Volume of Mortar Required

Volume=Area×Thickness=0.5m²×0.012m=0.006m³

1	Surface preparation (cleaning and chiseling the cracked wall surface)	0.5	m²	1	0.5
2	Application of rich cement mortar (12 mm thick)	0.006	m³	1	0.006
3	Curing and finishing after mortar application	0.5	m²	1	0.5

3- **Treatment Area (H × W)= 2.0 m × 1.0 m = 2.0 m²**

Volume of Mortar Required

Volume=Area×Thickness=2.0m²×0.012m=0.024m³

S. No	Description	Qty	Unit	Number	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	2	m²	3	6
2	Application of rich cement mortar (12 mm thick)	0.024	m³	3	0.072
3	Curing and finishing after mortar application	2	m²	3	6

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAPS		
		
		
		

BOQ FOR WALL CRACK STRENGTHENING

DETAILED CALCULATIONS

Treatment Area (H × W)= 3.0 m × 4.0m = 12 m²

Volume of Mortar Required

Volume=Area×Thickness=12.0m²×0.012m=0.156m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	12	m²	1	12
2	Application of rich cement mortar (12 mm thick)	0.156	m³	1	0.156
3	Curing and finishing after mortar application	12	m²	1	12

BOQ FOR WALL CRACK STRENGTHENING

DETAILED CALCULATIONS

Treatment Area (H × W)= 1.5 m × 2.0m = 3.0 m²

Volume of Mortar Required

Volume=Area×Thickness=3.0m²×0.012m=0.036m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	3	m²	2	6
2	Application of rich cement mortar (12 mm thick)	0.036	m³	2	0.072
3	Curing and finishing after mortar application	3	m²	2	6

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

BOQ – Repair Around Pipe Penetration (CEILING)

WIDTH = 1000 mm = 1.0 m
Length = 1.0 m
Total Area: Area =1.0m×1.0m=1.0m²

Item No.	Description	Quantity	Unit
1	Chipping and removal of all loose concrete & cleaning around the pipe (1X1 m area)	1	m²
2	Anti-corrosive treatment on exposed reinforcement (if any)	1	rmt
3	**Seepage treatment** with pressure grouting/polymer injection (non-shrink)	1	m²
4	**Formwork fixing** around the opening (if soffit is exposed)	1	m²
5	**Micro Concrete jacketing (0-aggregate, non-shrink)** including mixing, placing & curing	0.05	m³
6	**Finishing, leak-proofing and curing (using curing compound or water curing)**	1	m²

Material Details:

Micro concrete: Ready-mix type

Quantity = **1 m² X 50 mm thick = 0.05 m³**

Waterproof chemical: Integral for seepage arrest (Dr. Fixit Pidicrete URP / Sika Latex / similar)

Formwork: Small timber/ply shutter or pipe collar mold

Tools: Grouting pump, vibrator (if needed), bonding agent (for RCC interface)

BOQ FOR WALL CRACK STRENGTHENING (Miscellaneous)

DETAILED CALCULATIONS

Treatment Area (H × W)= 1.0 m × 1.0m = 1.0 m²

Volume of Mortar Required

Volume=Area×Thickness=1.0m²×0.012m=0.012m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	1	m²	10	10
2	Application of rich cement mortar (12 mm thick)	0.012	m³	10	0.12
3	Curing and finishing after mortar application	1	m²	10	10

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

SNAP

KUNJ VIHAR CGHS LTD

BOQ REPORT

PAKING AREA (BASEMENT)

BOQ FOR CRACKED ROOF PARKING

WIDTH = 2000 mm = 2.0 m
Length = 3.0 m
Total Area:

Area =2.0m×3.0m=6.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	6	m²	1	6
2	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	6	m²	1	6
3	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.072	m³	1	0.072
4	Curing and finishing of surface after repair	6	m²	1	6

Mortar Volume (approx.):

Volume=Area×Thickness=6.0m²×0.012m=0.072m³ (for one slab)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED CEILING PARKING

WIDTH = 1000 mm = 1.0 m
Length = 2.0 m
Total Area:

Area =2.0m×1.0m=2.0m²

Item No.	Description	Unit Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping and cleaning cracked	2	m²	2	4
2	Application of polymer modified mortar / rich cement mortar (avg. 12mm thick)	0.024	m³	2	0.048
3	Curing and finishing of surface after repair	2	m²	2	4

Mortar Volume (approx.):

Volume=Area×Thickness=2.0m²×0.012m=0.024m³ (for one slab)

Cement & sand for rich mix (1:3) or polymer-modified mortar as per specs.

PROCEDURE SHOULD BE FOLLOWED ACCORDING TO PAGE 93-100 OF THE REPORT

VISUAL PICTURES

BOQ FOR CRACKED CEILING WITH STEEL PARKING

DATA (SLAB JACKETING)

Parameter	Value
AREA	1.5 × 1.0 m = 1.5 m²
BAR DIA	10MM
SPACING	100MM C/C
TOTAL PLATER THICKNESS	**20MM**

CALCULATE QUANTITY OF ADDITIONAL 10 MM BARS

Number of bars along 1.5**m length**

(1500/100)+1=16

Length of each bar =

1.2m (0.2 WILL BE INSERTED IN BEAM)

Total length of bars =

16x1.2=19.2m

Weight of 10 mm dia steel =

0.620kg/m.

Total steel = 19.2 × 0.62 = ~12.0 kg

Total steel+7% wastage = 13.0Kg

PLASTER / JACKETING VOLUME

Total thickness = **20 mm = 0.02 m**

SO, **Volume = 1.50X0.02 = 0.03m³**

S. No	Description	Qty	Unit	Numbers	Total Qty
1	Chiseling till sound concrete, extending min. 200 mm beyond corrosion	1.5	m²	1	1.5
2	Cleaning existing rebars and applying epoxy primer / corrosion inhibitor	1.5	m²	1	1.5
3	Welding additional 10 mm dia bars at 100 mm c/c both ways	13	kg	1	13
4	Applying epoxy bonding agent	1.5	m²	1	1.5
5	Plastering with PMM or rich cement mortar (1:3), 20 mm thick	0.03	m³	1	0.03
6	Protective anti-carbonation / waterproof coating	1.5	m²	1	1.5

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

Visual picture

BOQ FOR MODERATE CRACKS IN BEAMS PARKING

BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	800 mm (W) × 400 mm (D)
Length	8 m
Sides to be treated	**3 sides (bottom + 2 verticals)**
Top face	**Remains intact (supports wall/ slab)**

JACKETING & REINFORCEMENT DETAILS

S. No	Item Description	Qty	Unit	number of beams	total Qty
1	Surface preparation & cleaning (3 sides)	12.8	m²	2	25.6
2	Fixing chicken mesh (22 gauge, ½"x½") with nails & washers	12.8	m²	2	25.6
3	Application of polymer modified/ rich cement mortar (12 mm thick)	0.1536	m³	2	0.3072
4	Curing and surface finishing after plastering	12.8	m²	2	25.6

CALCULATION DETAILS:

Surface Area for Chicken Mesh & Plaster: (for one beam)

Side 1 (vertical): 0.400 × 8.0 = 3.2 m²

Side 2 (bottom): 0.80 × 8.0 = 6.4 m²

Side 3 (vertical): 0.40 × 8.0 =3.2 m²

Total Area: 3.2 + 6.4 + 3.2 = **12.8 m²**

Mortar Volume (12 mm = 0.012 m thickness):

Volume=AreaxThickness=12.8x0.012=0.1536 m³

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

PICTURES

SNAPS






BOQ FOR Major CRACKS IN BEAMS BEAM

DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	300X450MM
Length	5.0m
Sides to be treated	**2 sides (bottom + one vertical sides)**
Top face	**Remains intact (supports wall/ slab)**

STRENGTHENING DETAILS

S. No	Item Description	Qty	Unit	number	total Qty
1	Chipping of loose concrete and rust cleaning	3.75	m^2	1	3.75
2	Providing & welding of 3 nos. 20 mm dia longitudinal bars (5.4 m including 200 mm at each end)	43	kg	1	43
3	Drilling & inserting bars in columns with chemical grout (Hilti/Fischer) – 20 mm dia, 200 mm depth	6	No's	1	6
4	Providing & fixing of 8 mm stirrups @100 mm c/ c for 5.0 m beam	19.5	kg	1	19.5
5	Supply & fixing of shutter/formwork where needed	0.1125	m^3	1	0.1125
6	Application of polymer-modified mortar/rich cement mortar (1:3), 30 mm thick	1.8	m^2	1	1.8
7	Surface curing and finishing	3.75	m^2	1	3.75

CALCULATION DETAILS

Surface Area for Plaster (2 sides of beam):

Side 1 (vertical): 0.45 × 5.0 = 2.25 m^2 Side 2 (bottom): 0.3 × 5.0 = 1.5 m^2 **Total Area:** 2.25+ 1.5 = **3.75 m^2**

Volume of Plaster:

3.75 m^2 area X 30 mm thickness =0.1125 m^3 polymer-modified mortar

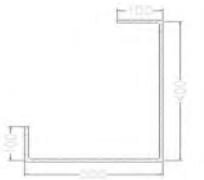
20 mm dia bars:

3 bars × (5.0 m + 0.2 m + 0.2 m) = 3 × 5.4 = **16.2 Rmt**

16.2 × 2.47 = **~40.0 kg**

(200MM INSERT IN BEAMS BOTH SIDE) Total weight +7% wastage=43kg

8 mm Stirrup Weight (L-type): Each stirrup = 0.90 m



No. of stirrups = 51

Total length = 45.9 m

Weight = 45.9 × 0.395 = **18.14 kg**

Total weight +7% wastage=19.5kg

PROCEDURE SHOULD BE FOLLWED ACCORDING OF THE REPORT

SNAPS	
	

BOQ FOR WALL CRACK STRENGTHENING

DETAILED CALCULATIONS

Treatment Area (H × W)= 3.0 m × 3.0m = 9.0 m²

Volume of Mortar Required

Volume=Area×Thickness=9.0m²×0.012m=0.108m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	9	m²	2	18
2	Application of rich cement mortar (12 mm thick)	0.108	m³	2	0.216
3	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails & washers	9	m²	2	18
4	Curing and finishing after mortar application	9	m²	2	18

Waterproofing agent should be applied in two coats with polymer slurry to prevent moisture ingress.

SNAP

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93-100 OF THE REPORT

BOQ FOR MINOR & Major CRACKS IN BEAMS BEAM DETAILS

Parameter	Value
Beam type	Tie beam
Existing size	400X800MM
Length	8.0M
Chiseling depth	20–25 mm on bottom & two sides only
Sides to be treated	**3 sides (bottom + two vertical sides)**
Top face	**Remains intact (supports wall/ slab)**

STRENGTHENING DETAILS

S. No	Item Description	Qty	Unit	number	total Qty
1	Surface preparation & chiseling (3 sides)	12.8	m²	1	12.8
2	20 mm dia bars welded (3 bars × 1.5 m = 4.5 m)	85	m²	1	85
3	8 mm U-type stirrups @150 mm c/c (11 Nos, 1.248 m each)	34	kg	1	34
4	Plastering with rich mortar/polymer (20 mm thick on 3 sides)	0.384	m³	1	0.384
5	Surface curing and finishing after plastering	12.8	m²	1	12.8

CALCULATION DETAILS

Side 1 (vertical): 0.400 × 8.0 = 3.2 m² Side 2 (bottom): 0.80 × 8.0 = 6.4 m² Side 3 (vertical): 0.40 × 8.0 =3.2 m² **Total Area:** 3.2 + 6.4 + 3.2 = **12.8 m²**

Mortar Volume (30 mm = 0.030 m thickness):

Volume=AreaxThickness=12.8x0.030=0.384 m³ **20 mm Bars Weight:**

4 bars × 8.0 m+(0.3M) = 32.3 m Weight = 2.47 kg/m × 32.3 m = **~79.8 kg**

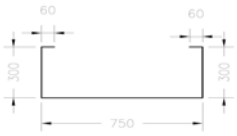
(150MM INSERT IN BEAMS)
Total weight +7% wastage=85kg

8 mm Stirrup Weight (U-type): Each stirrup = 1.470 m

No. of stirrups = 54

Total length = 79.38 m

Weight = 79.38 × 0.395 = **31.35 kg**



Total weight +7% wastage=34kg

PROCEDURE SHOULD BE FOLLWED ACCORDING OF PAGE 93-100 OF THE REPORT

SNAPS

BOQ – Circular Column Strengthening (Parking Area)

Column Details:

Column Shape: Circular
Height: 4.0 m
Diameter: 1.0 m
Periphery (πD): 3.14 m
Vertical Bars: 12 nos. of 12 mm dia
Stirrups: 8 mm dia @100 mm c/c (circular rings)
Anchorage for vertical bars: 200 mm insertion in slab and footing (both ends)
Concrete Cover/Plaster (if jacketed): 30 mm (assumed)

BOQ – Circular Column Strengthening (Jacketing)

Item No.	Description	Quantity	Unit	Numbers	Total Quantity
1	Surface preparation: Chipping of old plaster & loose concrete, rust removal from rebars	12.6	m²	1	12.6
2	Fixing **12 vertical bars of 12 mm dia** (4.4 m length incl. 200 mm at both ends)	50	Kg	1	50
3	Fixing **8 mm dia circular stirrups @ 100 mm spacing** throughout 4.0 m height	41	Nos	1	41
4	Total stirrup length per ring = 3.14 m (periphery) × 40 =	55	Kg	1	55
5	Shuttering/Formwork for jacketing (circular plywood or steel sheets)	12.6	m²	1	12.6
6	Application of **polymer-modified micro concrete / rich mortar (30 thick)**	0.38	m³	1	0.38
7	Finishing & Curing	12.6	m²	1	12.6

Material Breakdown:

Steel Bars:

Vertical 12 mm bars:

12 bars × 4.4 m = **52.8 Rmt** (200 mm insertion in both end)

Weight = 52.8 × (12²/162) = 52.8 × 0.888 = **~46.88 kg**

(Total weight + 7% watage)=50Kg

8 mm circular stirrups:

41 rings × 3.14 m = **128.74Rmt**

Weight = 128.74 × 0.395 = **~50.85 kg** (Total weight + 7% watage)=55Kg

Mortar Volume:

Thickness : 30 mm

surface area: π × D × h = 3.14 × 1 × 4 = **12.56 m²**

Volume = 12.56 × 0.03 = **0.377 m³ ≈ 0.38 m³**

BOQ FOR COPING CRACK STRENGTHENING (Miscellaneous) FOR ALL THREE BUILDINGS (TOP FLOOR)

DETAILED CALCULATIONS

Treatment Area (L × W)= 75.0 m × 0.5m = 37.5 m²

Volume of Mortar Required

Volume=Area×Thickness=37.5m²×0.012m=0.45m³

S. No	Description	Qty	Unit	Number of walls	Total Qty
1	Surface preparation (cleaning and chiseling the cracked wall surface)	37.5	m²	1	37.5
2	Application of rich cement mortar (12 mm thick)	0.45	m³	1	0.45
3	Supply & fixing of chicken mesh (22 gauge, ½" × ½") with nails	37.5	m²		37.5
4	Curing and finishing after mortar application	37.5	m²	1	37.5

PROCEDURE SHOULD BE FOLLWED ACCORDING TO PAGE 93 TO 100 OF THE REPORT

SNAPS

SLAB CEILING STRENGTHENING STEPS FOR MAJOR CRACKS:–

1.Barricade the damaged area and restrict live loads on the slab.

2.Mark and identify the affected slab zone to be repaired.

3.Remove all loose/ spalled concrete using a chisel or breaker till sound concrete is exposed.

4.Expose rusted rebars minimum 200 mm beyond visible corrosion.

5.Clean rebars thoroughly using a wire brush or sandpaper.

6.Apply two coats of zinc–rich epoxy primer on cleaned reinforcement (e.g., Nitozinc Primer).

7.Fix additional 8 mm bars for reinforcement if required; weld to existing bars.

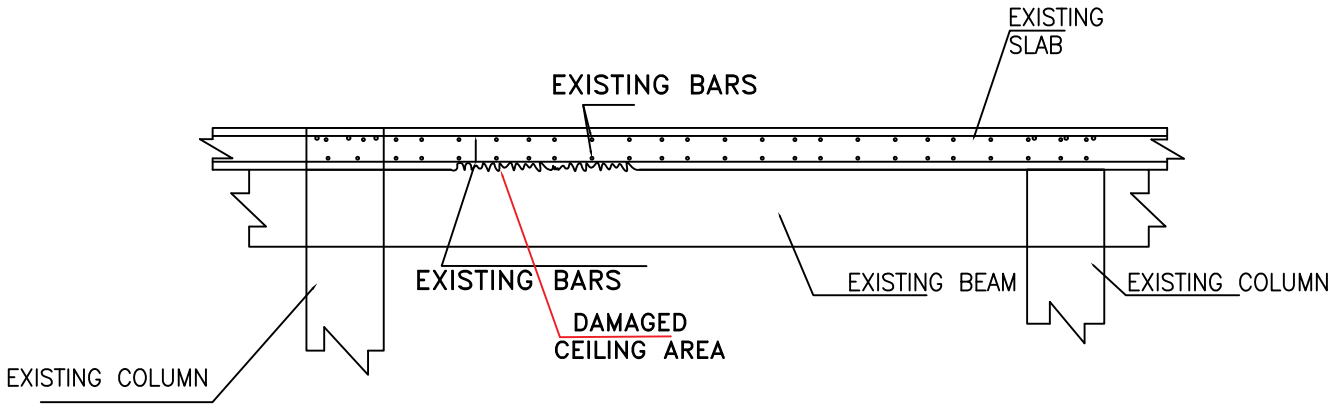
8.Apply epoxy bonding agent (e.g., Nitto Bond EP) on the concrete surface.

9.Apply PCM(Dr. Fixit Polymer Mortar)/rich cement mortar (1:3) mix to restore the slab section .

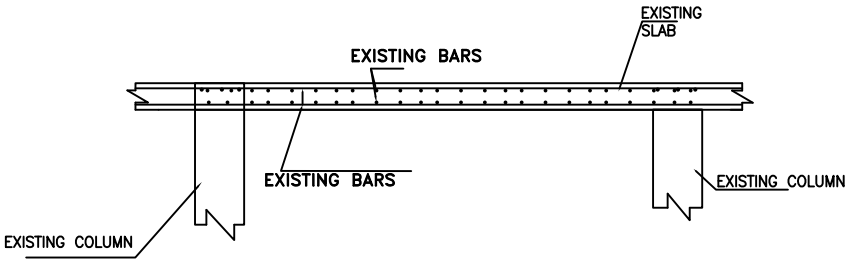
10.Two application methods are possible:
   a) Traditional hand trowel application
   b) Guniting – spray application under pressure (recommended for better compaction, adhesion, and finish)

11.Cure for 7–10 days using wet hessian cloth or curing compound.

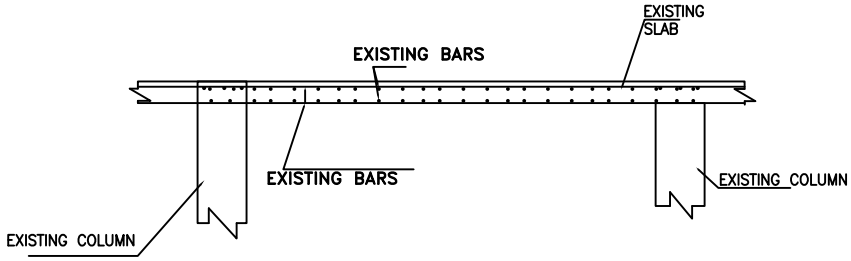
12.Finish the slab soffit with Plaster.
13.Apply protective coating (anti–carbonation or waterproofing) on the repaired surface.



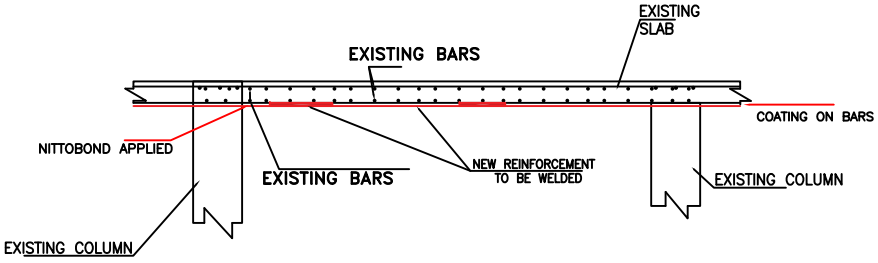
EXISTING SLAB



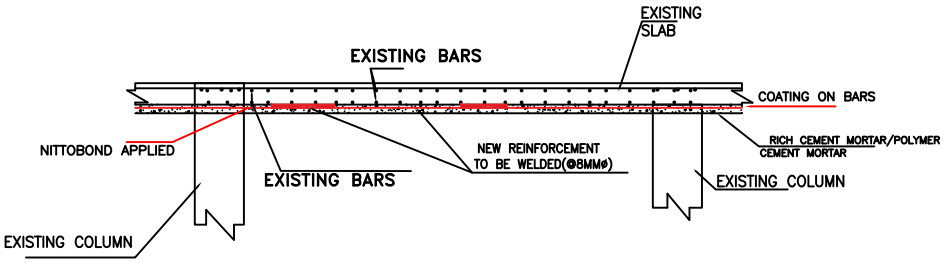
EXISTING SLAB



REMOVAL OF LOOSE CONCRETE(COVER)



NEW REINFORCEMENT TO BE WELDED



RICH CEMENT MORTAR/POLYMER
CEMENT MORTAR REQUIRED

SLAB CEILING STRENGTHENING DRAWING FOR MAJOR CRACKS

SLAB CEILING STRENGTHENING – PROCEDURE (FOR MODERATE CRACKS WITH SLIGHTLY RUSTED BARS):–

1.Barricade the area and restrict all live loads on the slab.

2.Mark and identify the slab zones to be repaired.

3.Remove all loose/spalled concrete using a chisel or breaker until sound concrete is exposed.

4.Expose reinforcement bars up to 200 mm beyond visible cracks, only where necessary.

5.Clean rebars thoroughly using a wire brush or sandpaper to remove surface rust.

6.Apply two coats of zinc–rich epoxy primer (e.g., Nitozinc Primer) to the cleaned rebars to protect against corrosion.

7.Apply epoxy bonding agent (e.g., Nitto Bond EP) to the prepared concrete surface.

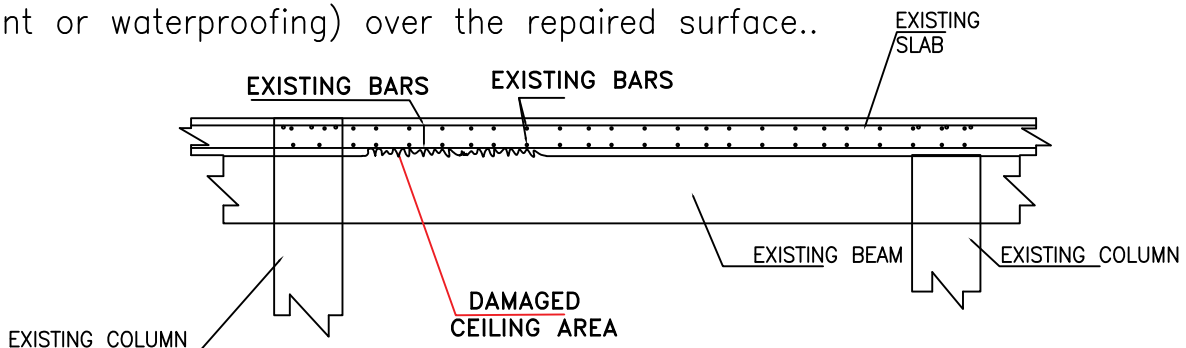
8.Apply PCM (Polymer Cement Mortar) or rich cement mortar (1:3 mix) to restore the slab soffit section.

9.Choose one application method:
a. Traditional trowel application, OR
b. Guniting (spray method) – recommended for better compaction, adhesion, and finish

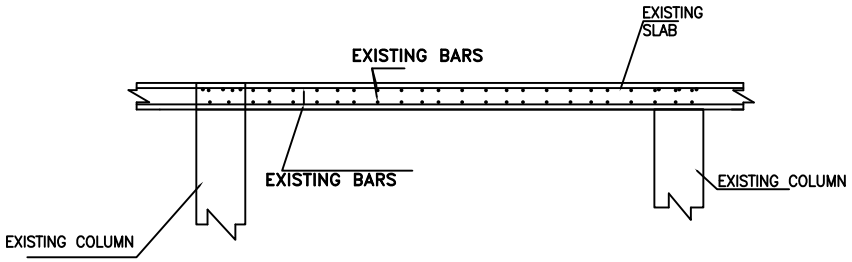
10.Cure the repaired area for 7–10 days using wet hessian cloth or curing compound.

11.Finish with a smooth plaster layer, if required, to match adjacent surfaces.

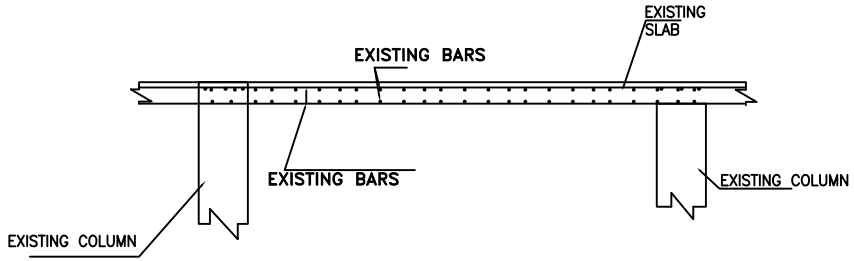
12.Apply protective coating (e.g., anti–carbonation paint or waterproofing) over the repaired surface..



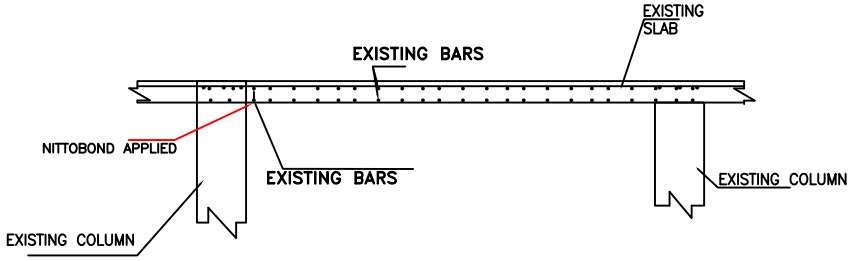
EXISTING SLAB



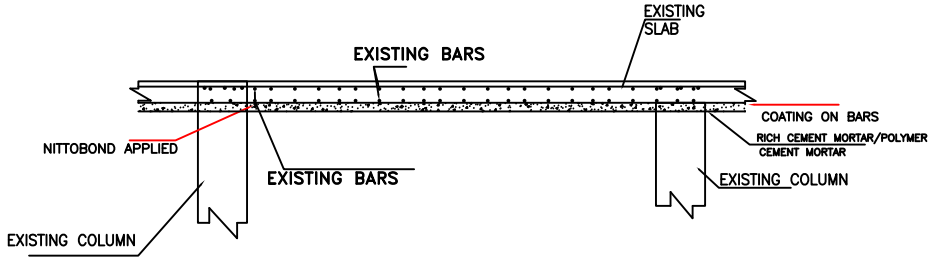
EXISTING SLAB



REMOVAL OF LOOSE CONCRETE(COVER)



NITTO BOND APPLIED



MICRO CONCRETE REQUIRED

SLAB CEILING STRENGTHENING DRAWING FOR MODERATE CRACKS

(96)

COLUMNS/BEAMS HAVING CRACKS NEED TO RECTIFY AS PER FOLLOWING STEPS.

1.Barricade the affected area and restrict live loads before starting the repair.

2.Mark and identify the damaged portion of the beam or column.

3.Remove all loose/spalled concrete using a chisel or jackhammer until sound concrete is exposed.

4.Expose corroded reinforcement bars at least 200 mm beyond visible rust.

5.Clean the reinforcement bars thoroughly using a wire brush, sandpaper, or sandblasting.

6.Apply two coats of zinc–rich epoxy primer (e.g., Nitobond Primer) to prevent further corrosion.

7.Fix additional rebars (typically 12–16 mm dia vertical bars for columns or 8–12 mm dia for beams) and weld them to the existing steel if required.

8.Apply epoxy bonding agent (e.g., Nitto Bond EP) to the prepared surface before concreting.

9.Pour M25 grade micro concrete using a funnel, hose, or gravity–fed method.

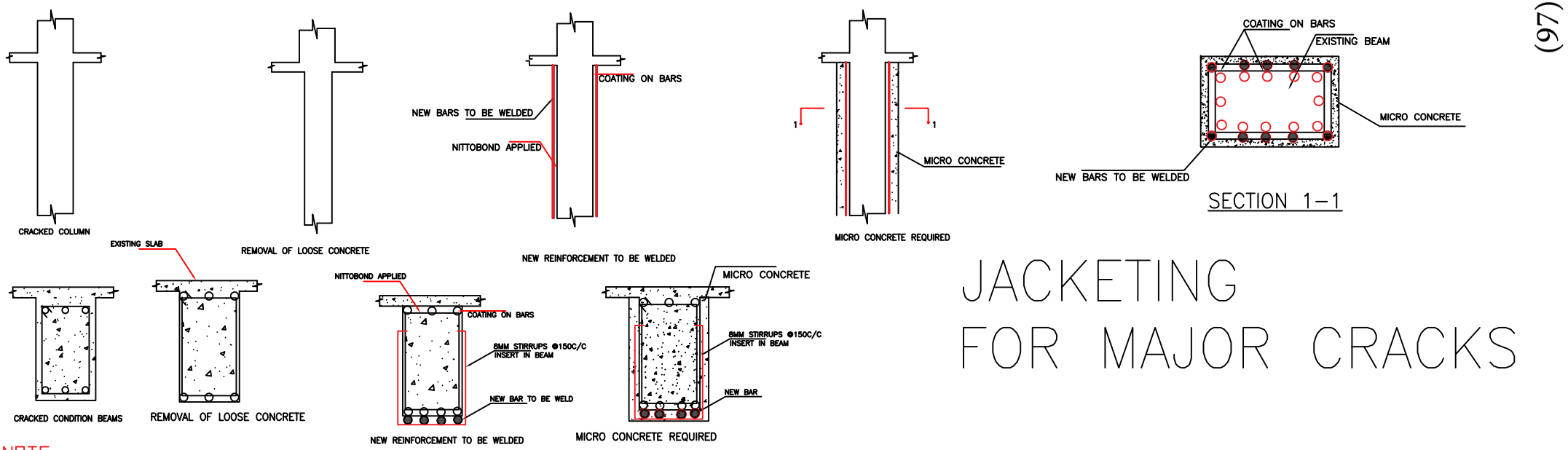
10.Ensure full coverage and eliminate voids.

11.Apply pressure grouting if honeycombing is anticipated.

12.Cure the repaired area for 7–10 days using wet hessian cloth or approved curing compound.

13.Finish with a protective plaster layer if required to match existing profile.

14.Apply protective coating such as anti–carbonation paint or elastomeric waterproofing to the repaired surface.



JACKETING FOR MAJOR CRACKS

NOTE:_

In cases where moderate/major cracks are observed in beams or columns, and the reinforcement is not rusted or only slightly corroded, then structural repair can be effectively carried out using M25 micro concrete without the need for rebar replacement.

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STRENGTHENING OF WALL CRACKS

1.Barricade the damaged wall area and restrict access for safety.

2.Mark the full extent of the wall crack and any surrounding delaminated surface.

3.Remove loose plaster and deteriorated material from the wall using a hammer and chisel.

4.Clean the exposed wall surface and crack line with a wire brush or compressed air.

5.Cut galvanized chicken mesh slightly larger than the cracked portion of the wall.

6.Fix the chicken mesh securely to the wall using binding wire, or steel nails.

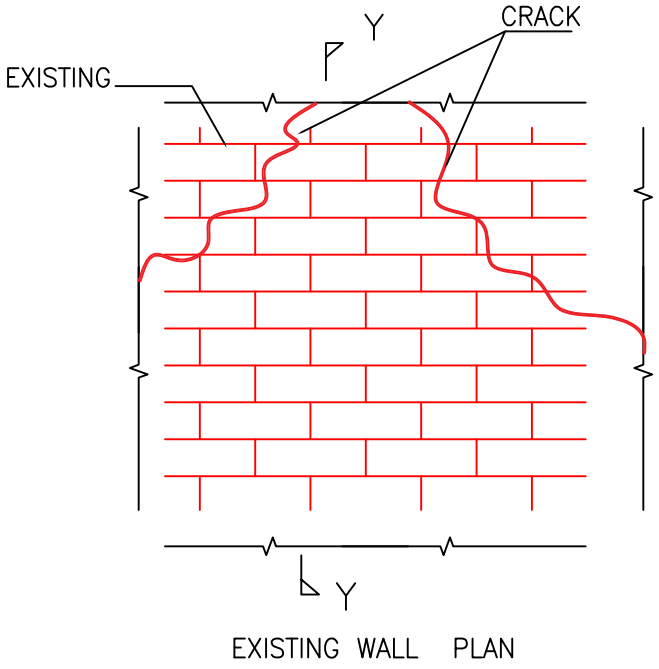
7.Apply epoxy bonding agent (e.g., Nitto Bond EP) on the prepared wall surface.

8.Apply polymer–modified cement mortar (1:3 mix) over the mesh, fully embedding it.

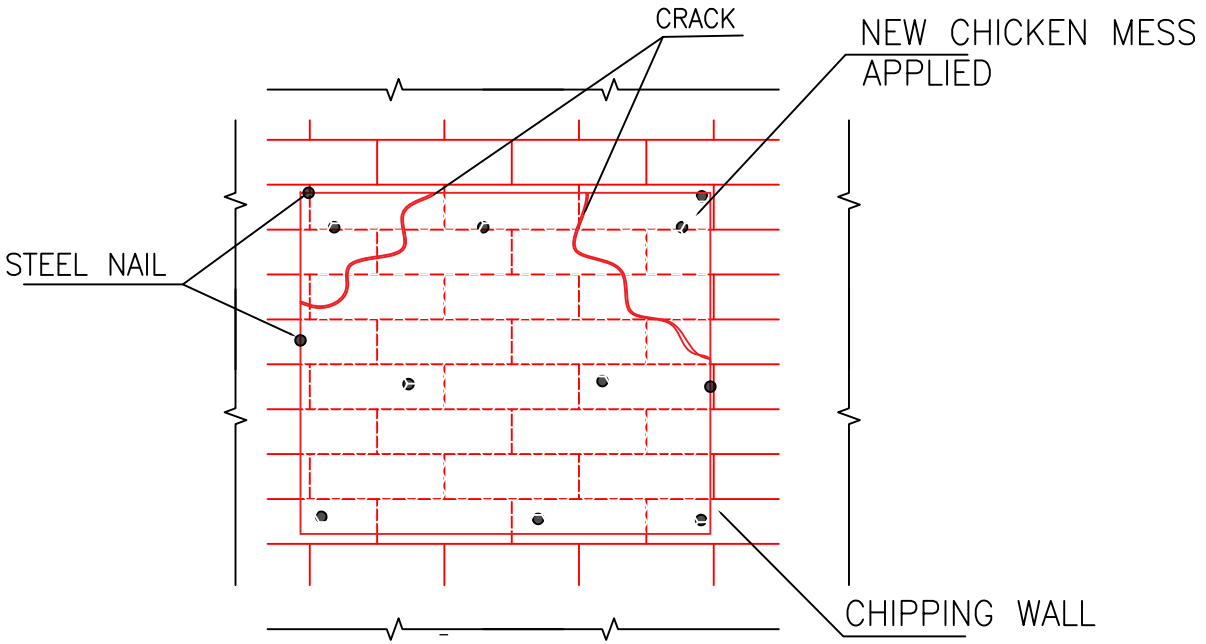
9.Finish the repaired wall surface with a trowel to match the adjacent texture.

10.Begin moist curing after initial set and continue for 5–7 days.

11.Apply anti–carbonation or waterproof coating over the wall if required after curing.

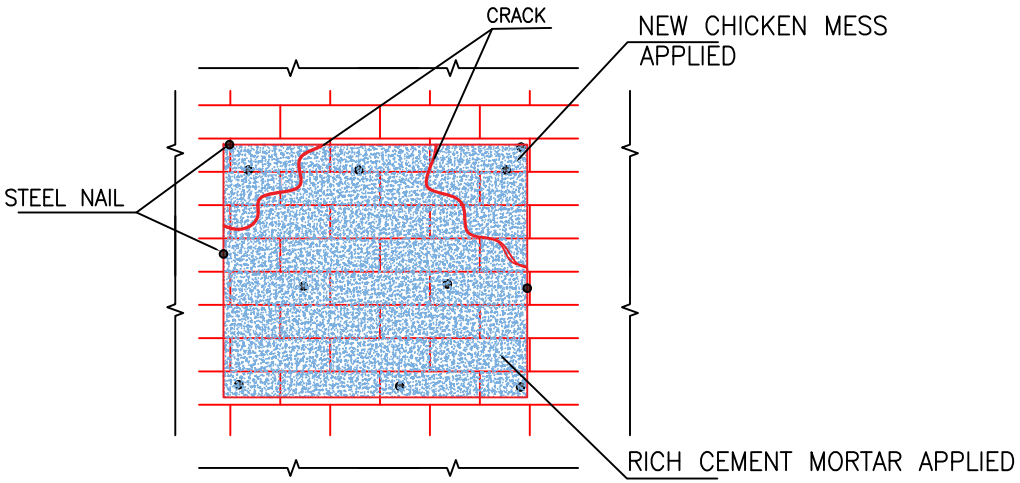


EXISTING WALL PLAN

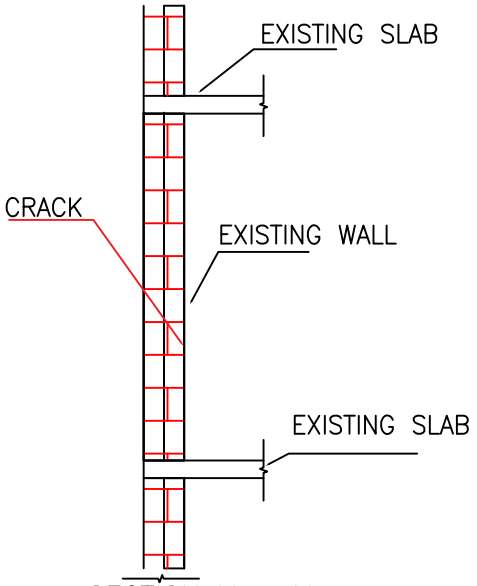


REMOVAL OF LOOSE
PLASTER (COVER)

STRENGTHENING DRAWING FOR WALL CRACK

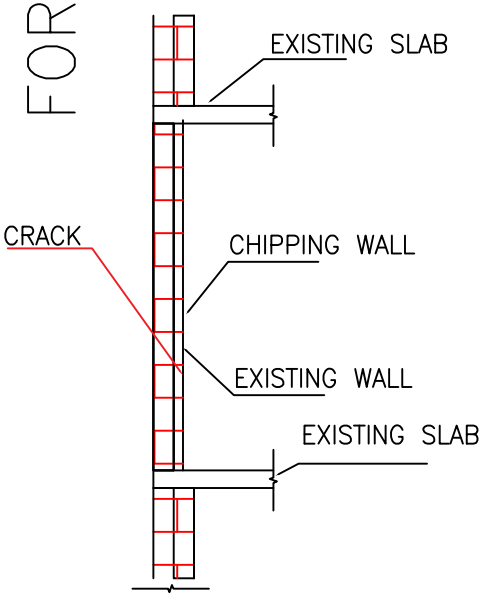


RICH CEMENT MORTAR APPLIED



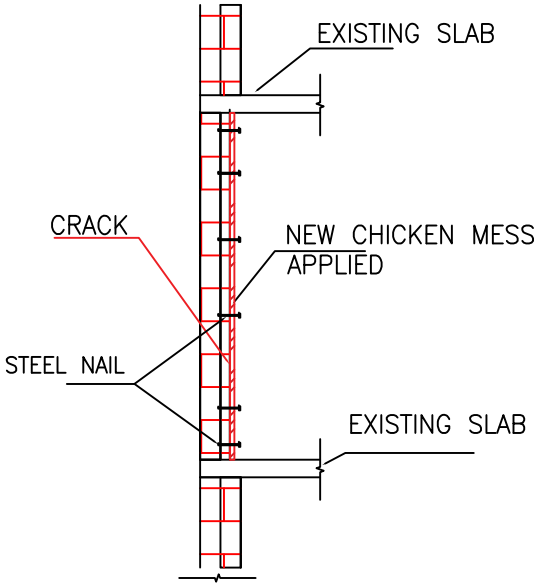
SECTION Y – Y

EXISTING WALL PLAN



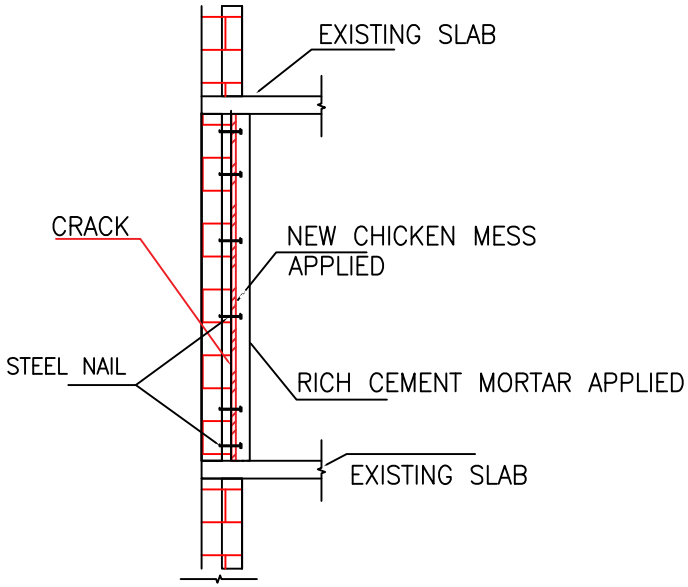
SECTION Y – Y

REMOVAL OF LOOSE PLASTER (COVER)



SECTION Y – Y

NEW CHICKEN MESS APPLIED



SECTION Y – Y

RICH CEMENT MORTAR APPLIED

REPAIR PROCEDURE FOR BEAM AND COLUMNS MODERATE CRACK

1 **Thoroughly clean the damaged concrete surface** using a wire brush or chisel to remove loose particles and laitance.

3 **Mark and identify** the damaged portion (like beam or column) that needs repair.

4 **Chip off all loose/unsound concrete** using a chisel or jackhammer until sound concrete is visible.

5 **Ensure surface preparation** is done by cleaning with a wire brush, sandpaper, or sandblasting.

6 **Get the reinforcement bars thoroughly cleaned** to remove rust, oil, or debris.

7 **Apply rust treatment** (e.g., Nitoferro or similar anti-corrosion agent) to existing rebars.

8 **Fix GI chicken mesh** (preferably 20 or 22 gauge) over the repair area using steel nails or steel wire ensuring it is taut and in contact with the surface.

9 **Apply epoxy bonding agent** (e.g., Nitobond EP) to the prepared surface before plastering.

10 **Prepare polymer-modified mortar** using non-shrink grout or approved repair mortar mixed with recommended dosage of bonding agents.

11 **Apply mortar** over the chicken mesh using firm hand pressure to embed the mesh completely into the repair mortar.

12 **Finish the surface** to match the surrounding area using proper tools.

13 **Cure** as per product recommendation.

14 **Apply protective coating** or **elastomeric waterproofing** as required for long-term durability.

NOTE:-Reinforcement bars, should only be cut after inspection and approval by the retrofitting team on site.

Conclusion

Based on our detailed **visual inspection**, it is evident that the building exhibits **multiple structural and non-structural defects**, including but not limited to cracks in beams and columns, seepage issues, corrosion of reinforcement, inadequate cover, and signs of material deterioration.

It is important to note that **visual inspection methods are indicative and not absolute**. While they provide a reliable preliminary assessment of the building's health, the observations are subject to limitations such as surface concealment, lighting conditions, and inaccessible areas. As a result, the actual extent of defects may **vary by approximately 10–15%** from what has been visually identified.