

PATCHING

1.0 GENERAL

- .1 The following specifications apply to all backfill and asphalt patching required for all shallow cuts that are created for sidewalk renewal and driveway crossings.

2.0 NON-SHRINK FILL

- .1 Non-shrink fill shall be cast on the compacted backfill to a minimum thickness of 100 mm and to the base of the existing asphalt structure.
- .2 Specifications:
 - .1 Compressive strength - minimum (0.2) to maximum (0.5) MPa Maximum 56 day strength - 0.5 MPa
 - .2 Air entrainment may be used.
 - .3 Aggregate shall consist of washed sand conforming to the following limits.

Aggregate Grading	
Sieve Size (mm)	Percent Passing (%)
10.0	100
5.0	95-100
2.5	80-100
1.25	50-100
0.630	25-65
0.315	0-35
0.160	2-10
0.080	0-5

.4 Binder

- .1 Portland Cement Type 10 or Lime/Fly Ash (warm weather construction)
 - .1 For winter construction, Type 30 Portland cement may be used.

.5 Slump requirements

- .1 Minimum - 75 mm
- .2 Maximum - 125 mm

.6 Placing

- .1 Place material using methods which do not lead to segregation.
- .2 Pumping of non-shrink fill is permitted with approval of Engineer.
- .3 Internal vibratos or other methods of consolidation may be used to ensure that the undercut areas of pavement are fully supported.

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- .4 Temporary plating or other means of supporting traffic loads to be used to provide safe driving surface for traffic until pavement material is placed.
- .5 Protect freshly placed fill from heavy rain to prevent washout.
- .6 Do not place load upon new fill until authorized by Engineer.
- .7 Inspection and testing of non-shrink fill will be carried out by a CSA certified laboratory designed by Engineer.

3.0 ASPHALT SURFACE

- .1 To ensure a neat edge, the pavement shall be saw cut or routed to a depth of 100 mm or one half the pavement thickness, whichever is the greatest.
 - .1 This shall prevail over the entire perimeter.
- .2 An asphalt concrete lift shall not exceed 100 mm. Each lift shall be thoroughly compacted prior to placing an additional lift.
- .3 Type III asphalt shall be used.
- .4 Asphalt material shall be compacted with equipment sufficient enough to achieve 93.0% of maximum relative density.