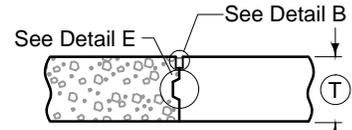
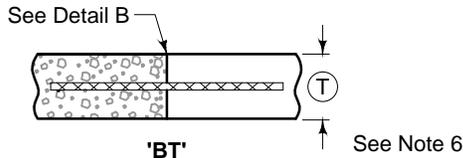


'B'
PLAIN JOINT
(Abutting Pavement Slabs)

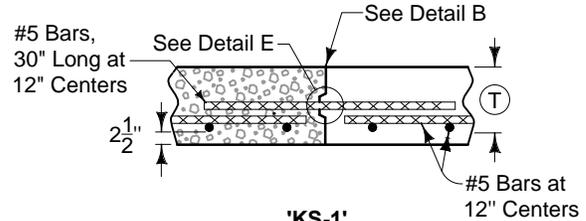


'K'
KEYED JOINT FOR ADJACENT SLABS
(Where T is 8" or more)

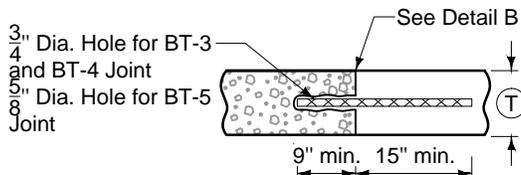


'BT' See Note 6
ABUTTING PAVEMENT JOINT - RIGID TIE

Ⓣ	Joint	Bars	Bar Length and Spacing
< 8"	'BT-1'	#4	36" Long at 30" Centers
≥ 8"	'BT-2'	#5	36" Long at 30" Centers

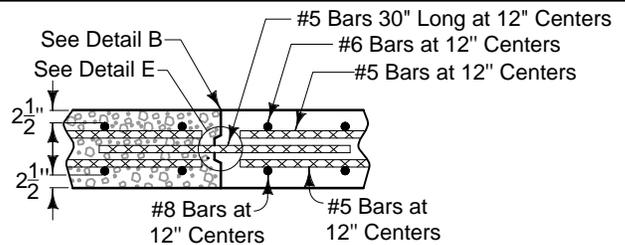


'KS-1'
[Single Reinforced Pavement (Bridge Approach)]

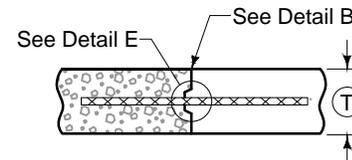


'BT'
ABUTTING PAVEMENT JOINT - RIGID TIE (Drilled)

Ⓣ	Joint	Bars	Bar Length and Spacing
< 8"	'BT-5'	#4	24" Long at 30" Centers
≥ 8"	'BT-3'	#5	24" Long at 30" Centers
	'BT-4'		24" Long at 15" Centers

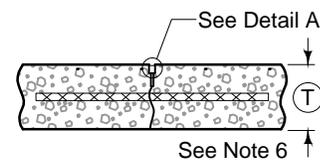


'KS-2'
[Double Reinforced Pavement (Bridge Approach)]



'KT' See Notes 5 & 6
ABUTTING PAVEMENT JOINT - KEYWAY TIE

Ⓣ	Joint	Bars	Bar Length and Spacing
< 8"	'KT-1'	#4	30" Long at 30" Centers
≥ 8"	'KT-2'	#5	30" Long at 30" Centers
	'KT-3'		30" Long at 15" Centers



'L'
CONTRACTION JOINT

Ⓣ	Joint	Bars	Bar Length and Spacing
< 8"	'L-1'	#4	36" Long at 30" Centers
≥ 8"	'L-2'	#5	36" Long at 30" Centers
	'L-3'		36" Long at 15" Centers

NOTES:

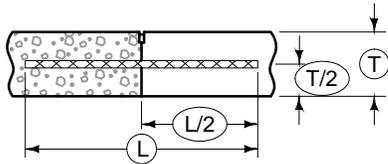
- When tying into old pavement, 'T' represents depth of sound portland cement concrete.
- Anchor tie-bars using specified grout or epoxy-bonding agent. Driving or hammering tie-bars into drilled holes not permitted.
- Alternative male keyway may be used for type K, KT-1, KT-2 or KT-3 subject to engineers approval.
- Type BT-3 joints may be placed as centerline joint for 7-inch pavements, if approved by engineer.
- Bar supports may be necessary for fixed form paving to ensure the bar remains in a horizontal position in the plastic concrete.
- The following joints are interchangeable, subject to the pouring sequence:
'BT-1', 'L-1', and 'KT-1'
'KT-2' and 'L-2'
'KT-3' and 'L-3'

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REVISION NO.: 1
REVISION DATE: MAY 2014

**CEDAR RAPIDS METROPOLITAN AREA
STANDARD DETAILS FOR PUBLIC IMPROVEMENTS**

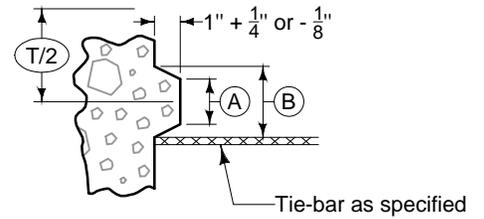
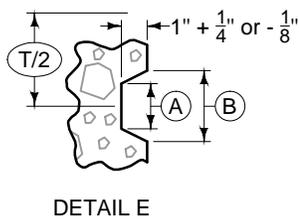
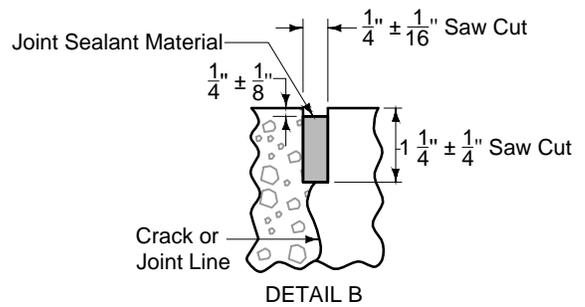
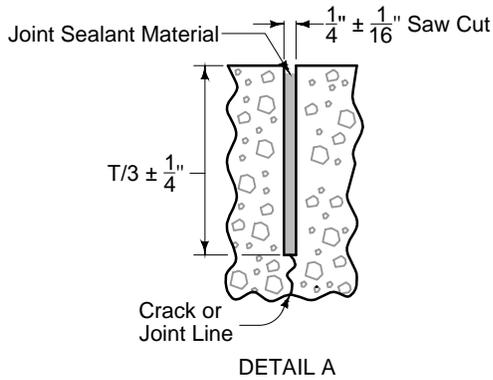
**LONGITUDINAL CONTRACTION JOINTS
SHEET 1 OF 2**

NO.
2700-022



TIE BAR PLACEMENT
(Applies to all joints unless otherwise detailed.)

BAR SIZE TABLE		
(T)	Dowel Diameter	Tie Bar Size
< 8"	$\frac{3}{4}$ "	#6
≥ 8 " but < 10"	$1\frac{1}{4}$ "	#10
≥ 10 "	$1\frac{1}{2}$ "	#11



KEYWAY DIMENSIONS			
Keyway Type	Pavement Thickness (T)	(A)	(B)
Standard	8" or greater	$1\frac{3}{4}$ "	$2\frac{3}{4}$ "
Narrow	Less than 8"	1"	2"

KEYWAY DIMENSIONS			
Keyway Type	Pavement Thickness (T)	(A)	(B)
Standard	8" or greater	$1\frac{3}{4}$ "	$2\frac{3}{4}$ "
Narrow	Less than 8"	1"	2"

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CEDAR RAPIDS METROPOLITAN AREA
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LONGITUDINAL CONTRACTION JOINTS
 SHEET 2 OF 2

NO.
 2700-022