

EXPANSION JOINTS – Small Movements

Rev: 03/2017

GRANOR® Ausflex Series – “ACB Stripseal”



The Granor® Ausflex Series ACB Stripseal Expansion Joint system is a specialty bolted down type expansion joint used only in the Australian state of Queensland for new works, and more widely as a retrofit solution. Typically ACB joint has been detailed for use with PSC plank beam style bridge structures predominantly used in Queensland.

ACB joints can also be used as rehabilitation / replacement joints in conjunction with drilled 'chemset' anchors.

Installation

It is recommended that ACB joints only be installed by experienced installation contractors or by bridge crews containing experienced personnel. Contact Granor if you require contact details for experienced contractors covering your area.



SYSTEM COMPONENTS

Aluminium Rails

ACB aluminium rails are made in Australia from structural / marine grade aluminium.

Elastomeric Gland

ACB joints utilise the same central elastomeric sealing glands as used with the 'AC-AR' joint system. There are two seals styles; drape type and flush type.

Fixings

The Granor® design utilises stainless steel M16 threaded rod together with Queensland Main Roads Department approved stainless steel ferrules as per the requirements of specification MRTS82. The sockets/ferrules can either be cast into a deck slab or cast directly into the PSC units.

For retrofit outcomes the stainless steel threaded rods are anchored into the concrete deck using drilled 'chemset' epoxy anchorages at 150mm typical spacing.

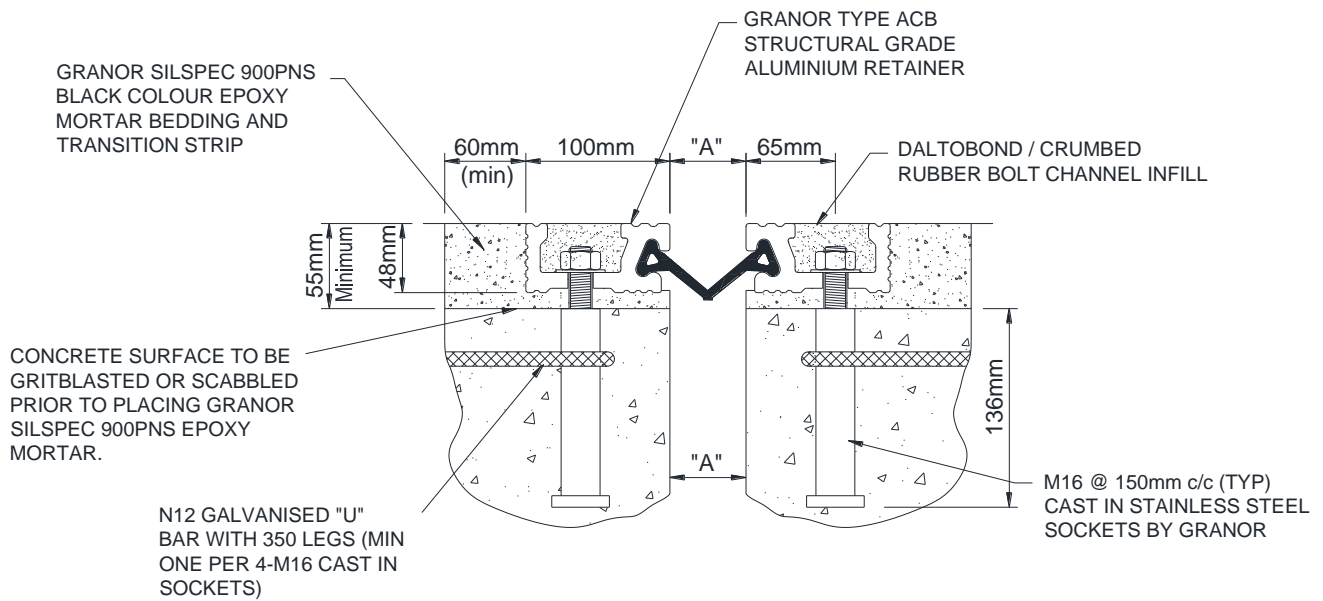
Channel Infill Material

Once the nuts are tightened the channel in the aluminium rails is infilled with a proprietary flexible rubber compound to exclude debris while permitting access for future maintenance.

Black Colour Epoxy Mortar



Granor SILSPEC 900PNS black colour epoxy mortar is used as bedding underneath the ACB aluminium rails and to provide protective upstand headers / transition strips beside the aluminium rails.

NEW WORKS DETAIL



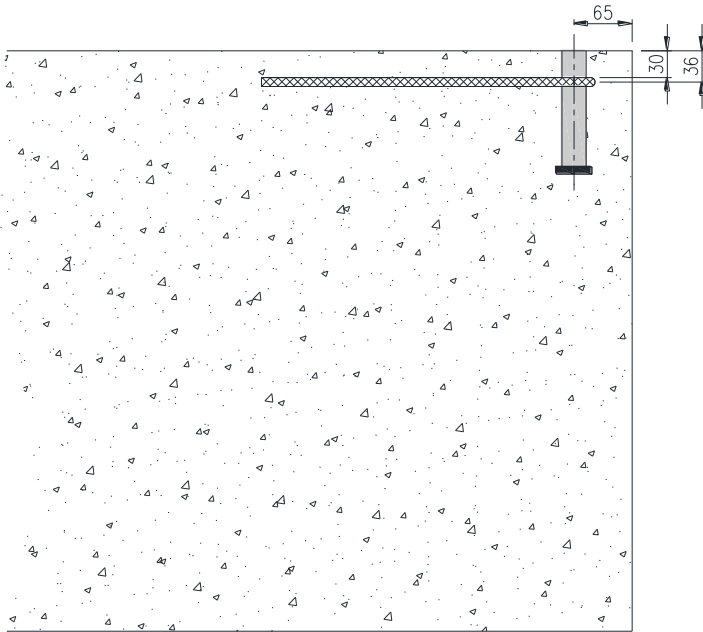
STANDARD DETAIL - NEW WORKS

GRANOR ACB BOLTED-IN ALUMINIUM STRIP SEAL EXPANSION JOINT SYSTEM.

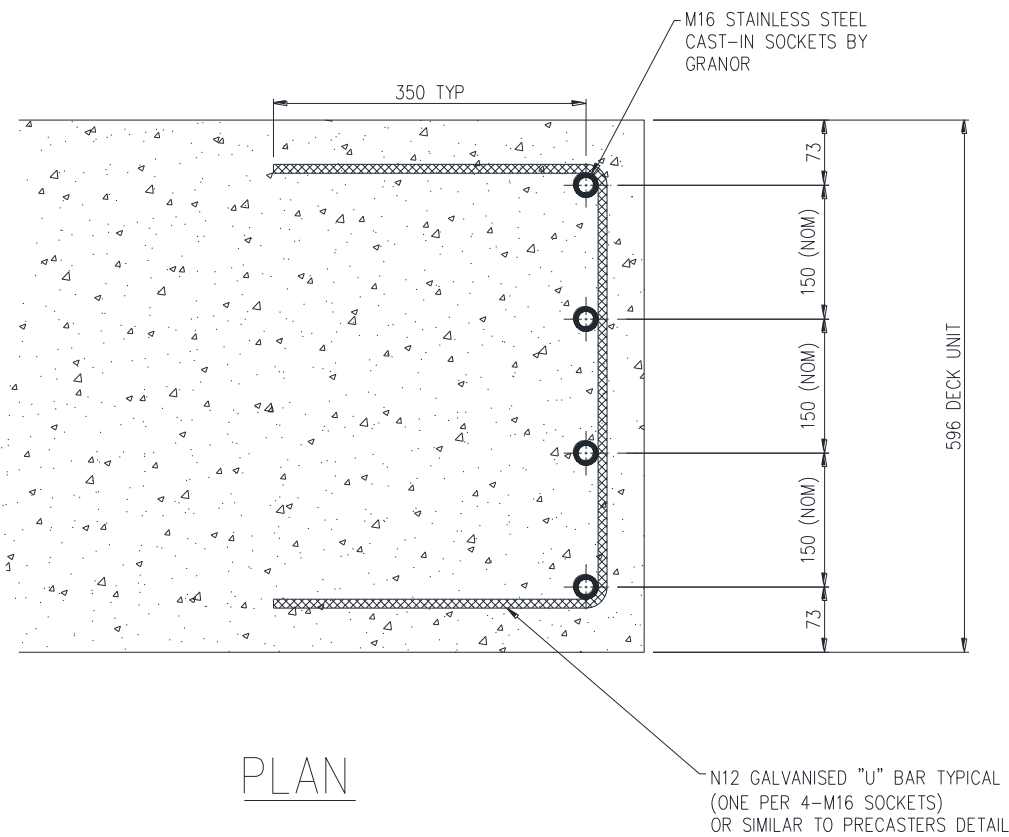
ACB EXPANSION JOINT TABLE					
PART No.	Movement Range min. to max. (mm)	Min Installation Gap Width "A" (mm)	M16 Stud Spacings (nominal)	Seal Type	Seal Profile
ACB-100D	0 - 100	38	150mm	100D	
ACB-125D	0 - 125	38	150mm	125D	Type "D"
ACB-100F	20 - 125	40	150mm	100F	 Type "F"

Note: wider Initial Gap Widths ("A") can be used provided the joint movement range will not be exceeded.

PSC DECK UNIT SOCKET DETAIL (DECK SLAB SOCKET DETAIL SIMILAR)



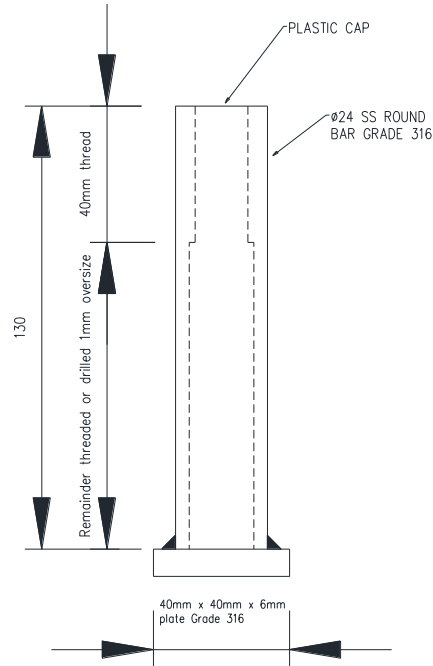
ELEVATION



PLAN

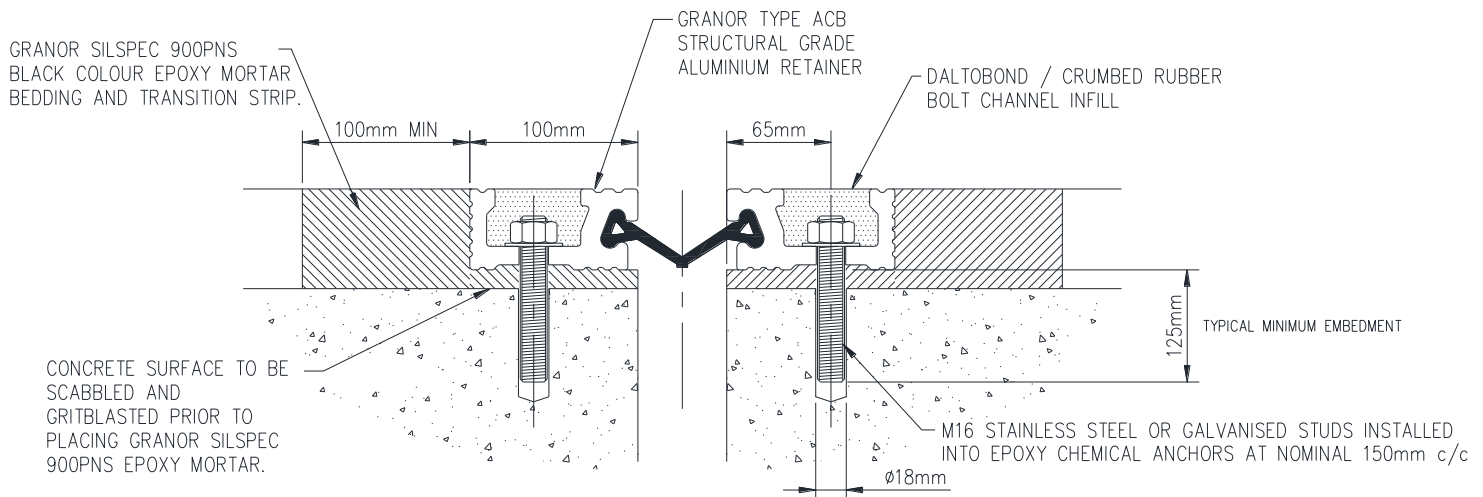
Note: positioning shown is typical only and may be adjusted by PSC Precaster as necessary.

CAST-IN SOCKET DETAIL



M16 STAINLESS STEEL CAST-IN SOCKET
No. OFF = ____

RETROFIT DETAIL



STANDARD DETAIL - RETROFIT **GRANOR ACB BOLTED-IN ALUMINIUM** **STRIP SEAL EXPANSION JOINT SYSTEM.**