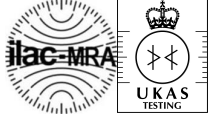



	Prepared by	Checked by	Approved by	
				
	Mr. B. Cowan Snr. Lab. Technician	Mr. Ryan Murphy Associate Director	Mr. Ryan Murphy Associate Director	


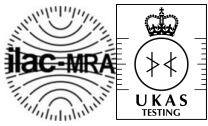



CONTROL INFORMATION	
Unique Identification Number	INSTALLATION PROCEDURE: EVDBZ
Creation Date	03 rd April 2018
Revision Number	02
Controlled Copy	No
Distribution	MASTER FILE, external release.

1.0 – Normative References:

- | | |
|------------------------------|--|
| BS EN 166: 2002 | British/ European Standard No. 166: 2002
<i>“Personal eye protection. Specifications.”,</i> |
| BS EN 140: 1999 | British/ European Standard No. 140: 1999
<i>“Respiratory protective devices. Half masks and quarter masks. Requirements, testing, marking.”,</i> |
| BS EN 14387: 2004 & A1: 2008 | British/ European Standard No. 14387: 2004 & A1: 2008
<i>“Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking.”,</i> |
| BS EN 388: 2016 | British/ European Standard No. 388: 2016
<i>“Protective gloves against mechanical risks.”,</i> |
| EWD: 2016 | Evolution Warranty Document: 2016 Edition
<i>“Evolution Fasteners Standard Product Warranty: 2016 Edition.”,</i> |
| ETA-13/0634 | European Technical Approval No. 13/0634
<i>“Metal anchor made of galvanised steel of size 6 x 40mm and 6 x 65mm for multiple use for non-structural applications in concrete.”</i> |

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	Prepared by	Checked by	Approved by	 UKAS Lab. No. 7485 Evolution Fasteners
				
	Mr. B. Cowan Snr. Lab. Technician	Mr. Ryan Murphy Associate Director	Mr. Ryan Murphy Associate Director	

2.0 – Required Equipment/ Apparatus:

1. Personal Protective Equipment (PPE):

- a. Eyeglasses meeting BS EN 166: 2002 Class 1F (or better),
- b. Dust mask with face piece meeting BS EN 140: 1999 and filters meeting BS EN 14387: 2004 & A1: 2008 (or better),
- c. Safety gloves meeting BS EN 388: 2016 (or better).

2. Hand tools, accessories and other small items:


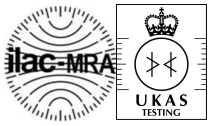
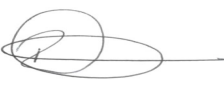


- a. PGM® Approved SDS™ drill bit of certified diameter 6.0mm and useable length as dictated by in-situ conditions and application,
- b. Claw hammer (minimum head weight of 20 ounces),
- c. Blow-out pump (or compressed air jet not less than 8 bar),
- d. 6.0mm wire tube brush (steel or brass bristles).

3. Power tools:

- a. SDS™ chucked Rotary Hammer Drill (110V corded such as Bosch GBH 3-28, or, 18V cordless such as Bosch GB18V-20).

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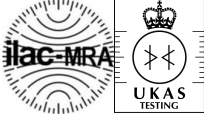



3.0 – Installation Instructions

NOTE: Failure to abide by these instructions and terms herein may void any Warranty provided by Evolution Fasteners (UK) Ltd. This document does not alleviate the user, designer or other party from their obligations under the Warranty. For further information please refer the Evolution Product Warranty Document.

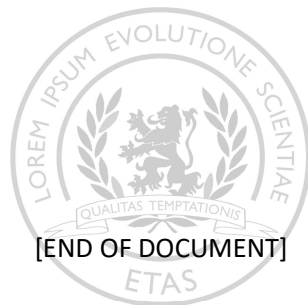
1. Ensure environmental conditions are correct for use and installation of the product, specifically (list is not exhaustive) that:
 - a. The products are being used in a dry and internal place,
 - b. The products are being used in the correct application as per the limitations prescribed in both Evolution Fasteners (UK) Ltd.’s technical literature and in ETA-13/0634,
2. Ensure that substrate and fixture meet the requirements and specifications of relevant clauses in ETA-13/0634,
3. Clear the installation area of dirt and debris and ensure that there are no other contaminating substances such as oil, grease, etc,
4. Using a PGM® Approved “Special Drive System” (SDS™) drill bit (for masonry/ concrete) with a certified diameter of 6.0mm in conjunction with an appropriate SDS™ chucked Rotary Hammer Drill (110V corded such as Bosch GBH 3-28, or, 18V cordless such as Bosch GB18V-20); drill a pilot hole through both the fixture material(s) and substrate material ensuring that:
 - a. The pilot hole is drilled perpendicularly (within $\pm 5.0^\circ$ of normal) to the substrate, and,
 - b. The fixture material(s) are suitable restrained or clamped to the substrate so that movement between fixture material(s) and substrate cannot happen, and,
 - c. The pilot hole is drilled to the minimum embedment depth as defined in ETA-13/0634 with a 5.0mm further drilling length to provide relief for fines and silts to rest in (without influencing the anchor),
5. Using a blow-out pump (or compressed air jet with a minimum supply pressure of 8 bar) blow out debris from the pilot hole,

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6. Using a 6.0mm wire brush remove debris from the pilot hole,
7. Insert the anchor into the pilot hole and using hand-force only; push the anchor until the underside of the flanged body component touches the topside of the fixture material(s),
8. Using a claw hammer (minimum head weight of 20 ounces), strike the pin component of the anchor until the topside of the pin component is flush with the topside of the flanged body component. Due to peening effects and other conditions due to manual hammering; the topside of the pin component may sit proud of the topside of the flanged component by + 2.5mm – 0.5mm.



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