

## Type Approval Certificate Extension

*This is to certify* that Certificate No. 97/00077(E1) for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

<b>PRODUCER</b>	Hilti Corporation
<b>PLACE OF PRODUCTION</b>	FL-9494 Schaan Principality of Liechtenstein
<b>DESCRIPTION</b>	Hilti DX Direct Mechanical Fastening System, comprising Hilti X-E fastenings produced using the Hilti DX process
<b>TYPE</b>	X-E Zinc coated threaded studs and nails identified with an 'H' marking (standard fastening element).  General Purpose nails: X-U, EDS, and DS  Nails for fastening thin sheeting: X-ENP-19 and X-ENP2K  Nails for fastening diaphragm decking: X-EDN and X-EDNK  Threaded stud connections: X-EM, X-EW, and X-EF  Composite fasteners: X-HS, X-CC, X-FCM and X-FCP
<b>APPLICATION</b>	For use in fastening carbon steel components to carbon steel base components in marine, offshore and industrial environments in accordance with Hilti Product Information.
<b>DESIGN CODE</b>	Hilti Direct Fastening Technology Manual, Product Information.
<b>Certificate No.</b>	97/00077(E2)
<b>Issue Date</b>	2 November 2009
<b>Expiry Date</b>	8 June 2013
<b>Sheet</b>	1 of 2

  
P. F. Moysey  
London Design Support Services  
Lloyd's Register EMEA

*Lloyd's Register EMEA*  
71 Fenchurch Street, London EC3M 4BS

## CONDITIONS OF APPROVAL

This Type Approval certificate should be read in conjunction with LR Technical Report no. 2003/CSG/TI/6331

Unless otherwise stated in the Hilti Direct Fastening Technology Manual, the fastened and base materials are to be carbon steel with a tensile strength greater than 370 N/mm<sup>2</sup>

The end user must ensure that the base and fastened materials possess adequate corrosion resistance for the environments in which they are to be used.

*"This Certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid certificate."*

*The attached Design Appraisal Document No. 97/00077(E2) and its supplementary Type Approval Terms and Conditions form part of this Certificate.*

All other details remain as the previous Certificate No. 97/00077(E1) to which this extension should be attached.

<b>Certificate No.</b>	97/00077(E2)
<b>Issue Date</b>	2 November 2009
<b>Expiry Date</b>	8 June 2013
<b>Sheet</b>	2 of 2



P. F. Moysey  
London Design Support Services  
Lloyd's Register EMEA

Lloyd's Register EMEA  
71 Fenchurch Street, London EC3M 4BS