TAF

Civil Engineering Laboratory 1134

材料及工程實驗室-台北

試 驗 報 告

報告號碼： HS-12-01390Y
C-12- 05190
頁 數： 1 OF 2
報告日期：101年 03月03日

壹、案件

1. 工 程 名 稱：中悅機構-信住建設蘆洲水湳街案
2. 業 主：信住建設股份有限公司
3. 承 包 商：晃茂營造股份有限公司
4. 委 託 單 位：泰竣工程有限公司
5. 供 料 廠 商：泰竣工程有限公司(品興工程股份有限公司)
6. 結 構 部 位：SA級檢定
7. 送 驗 人 員：泰竣工程有限公司(洪德琳)
8. 會 驗 人 員：泰竣工程有限公司(洪德琳)
9. 收 件 日 期：101年03月03日
10. 試 驗 日 期：101年03月03日
11. 會 驗 日 期：101年03月03日
12. 備 註：以上資料由顧客提供(收件及試驗日期除外)

貳、樣品名稱：冷鍛滾牙式鋼筋續接器

1. 母 材 ：#11-1支(引用HS-12-01391Y C-12-05191數據)
2. 續 接 器 ：#11-1支

參、試驗方法：中國土木水利工程學會混凝土工程設計規範與解說-土木401-1997 附錄乙

1. 母材拉力試驗依CNS 2111-G2013、CNS 2112 G2014規範辦理試驗
2. 高塑性反覆載重試驗：

$0 \rightarrow (0.95P_y \longleftrightarrow -0.5P_y)_{16圈} \rightarrow (5\varepsilon_{yn} \longleftrightarrow -0.5P_y)_{8圈} \rightarrow (10\varepsilon_{yn} \longleftrightarrow -0.5P_y)_{8圈} \rightarrow$ 拉斷

※母材標稱直徑：35.8mm

鋼筋種類：CNS 560 SD420W、D36

母材標稱降伏f_y：420 N/mm^2

肆、儀器與量測設備：

1. 加載試驗機：係採用本實驗室之鋼筋續接器專用試驗機配合油壓夾具。
2. 延伸計(長度變化量測設備)：
   係以特製量具(LVDT 2支)鎖緊於鋼筋上連接電腦，量具解析度0.001mm，
   試驗時以此設備直接測量變形量。
3. 鋼筋續接器續接性能試驗之量測長度(gage length) Lg取續接器長度加續接器兩側各1/2鋼筋直徑或2cm之大值，但量測長度小於500mm且無挫曲(Buckling)之虞時，可取500mm為量測長度。
   續接器設於量測長度之中央位置。

本實驗#11母 材 Lg= 179mm

#11續接器 Lg= 200mm

母材Esa值採用標稱值Es(199075 N/mm^2)

規範要求值僅供參考，合格之判定以委託單位實際要求為準。

報 告 簽 署 人

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有說明，此報告結果僅針對所送之樣品負責。未經合其書本公司書面許可，不可部份複製。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

6710107

No. 35, Wu Chyuan Road, Wu Ku District, New Taipei City, Taiwan/新北市五股區五權路35號
台灣檢驗科技股份有限公司 t (886-2) 2298-3355 f (886-2) 2295-7857 www.tw.sgs.com

Member of SGS Group

試 驗 報 告

報告號碼： HS-12-01390Y
C-12- 05190
頁 數： 2 OF 2
報告日期：101年 03月03日

伍、試驗數據分析與結果：

1. 鋼筋母材試驗：

試件編號	降伏強度 f_{yn}(N/mm^2)	抗拉強度 f_{un}(N/mm^2)	拉降比 f_{un}/f_{yn}	伸長率 ε_{un} (%)	降伏應變 ε_{yn}
#11R	445	642	1.44	17	0.00224
規範值	≧420 & ≦540	≧550	≧1.25	≧11	-

*母材試體合乎規範，因此續接器接合試體為有效試體。

2. 續接器接合鋼筋高塑性反覆載重試驗

2-1滑動量之測試結果

試片編號	滑動量						
	$(\delta_s)16_c$ (mm)	$(\delta_s)24_c$ (mm)	$(\varepsilon_s)24_c$ (%)	$(\varepsilon_s)24C/\varepsilon_{ys}$	$(\delta_s)32_c$ (mm)	$(\varepsilon_s)32_c$ (%)	$(\varepsilon_s)32C/\varepsilon_{ys}$
#11HP	0.107	0.298	0.136	0.605	0.338	0.153	0.685
規範要求(SA級)	≦0.3	≦0.9	-	≦1.5	≦1.8	-	≦3

2-2抗拉強度與伸長率之測試結果

試件編號	抗拉強度 f_{uc}(N/mm^2)	拉降比 f_{uc}/f_{yn}	伸長率* ε_{uc}(%)	破壞模式
#11HP	642	1.44	13	斷續接處外16cm
規範要求(SA級)	≧550	≧1.25	≧6	-

*Gage Length：500mm。

備註：

1. 本試驗之試樣及相關之試樣資料由委託單位提供。
2. 依客戶要求僅以ε_{uc}做為評定合格之標準。

規範要求值僅供參考，合格之判定以委託單位實際要求為準。

報告簽署人

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested. This test report cannot be reproduced, except in full, without prior written permission of the Company. 除非另有授權，此報告結果僅針對送交之樣品代表。未經本公司書面許可，不可部份複製。
This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

6710106