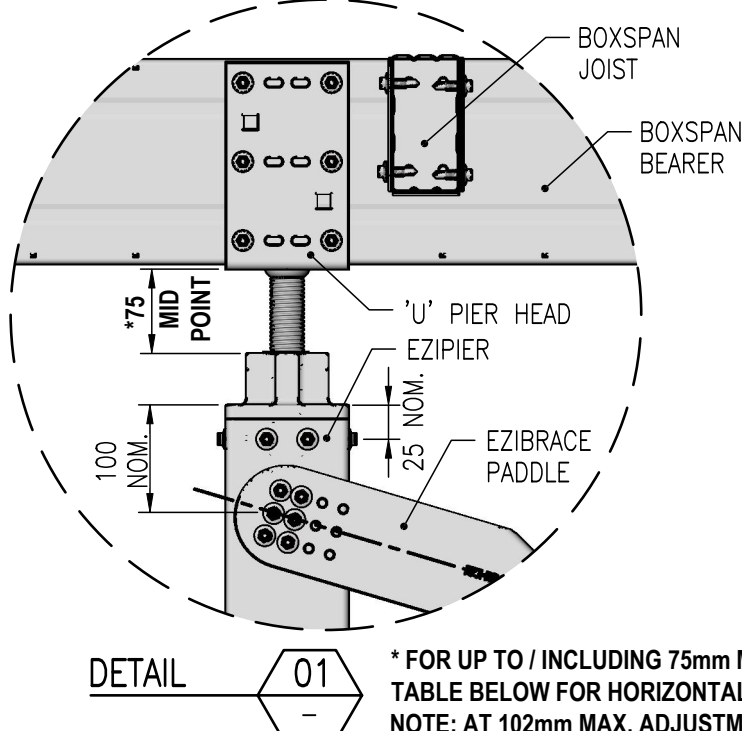
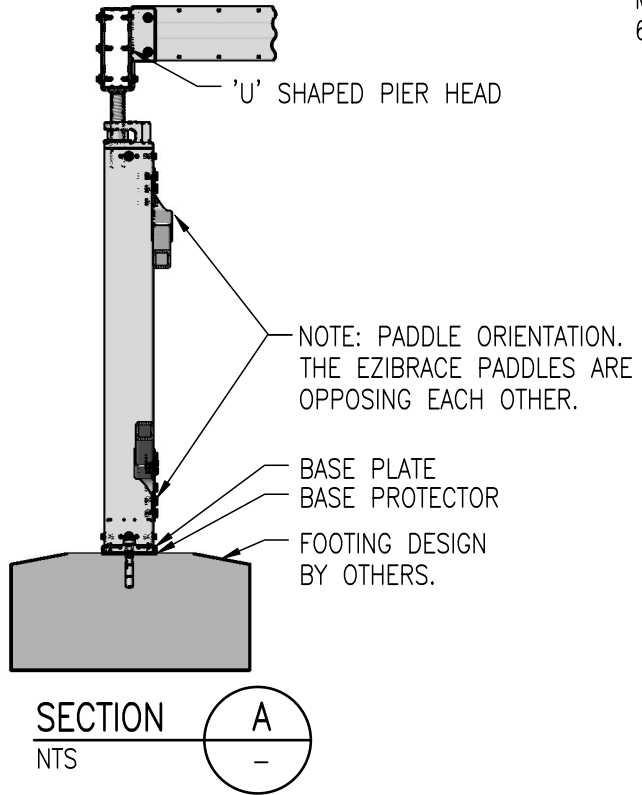
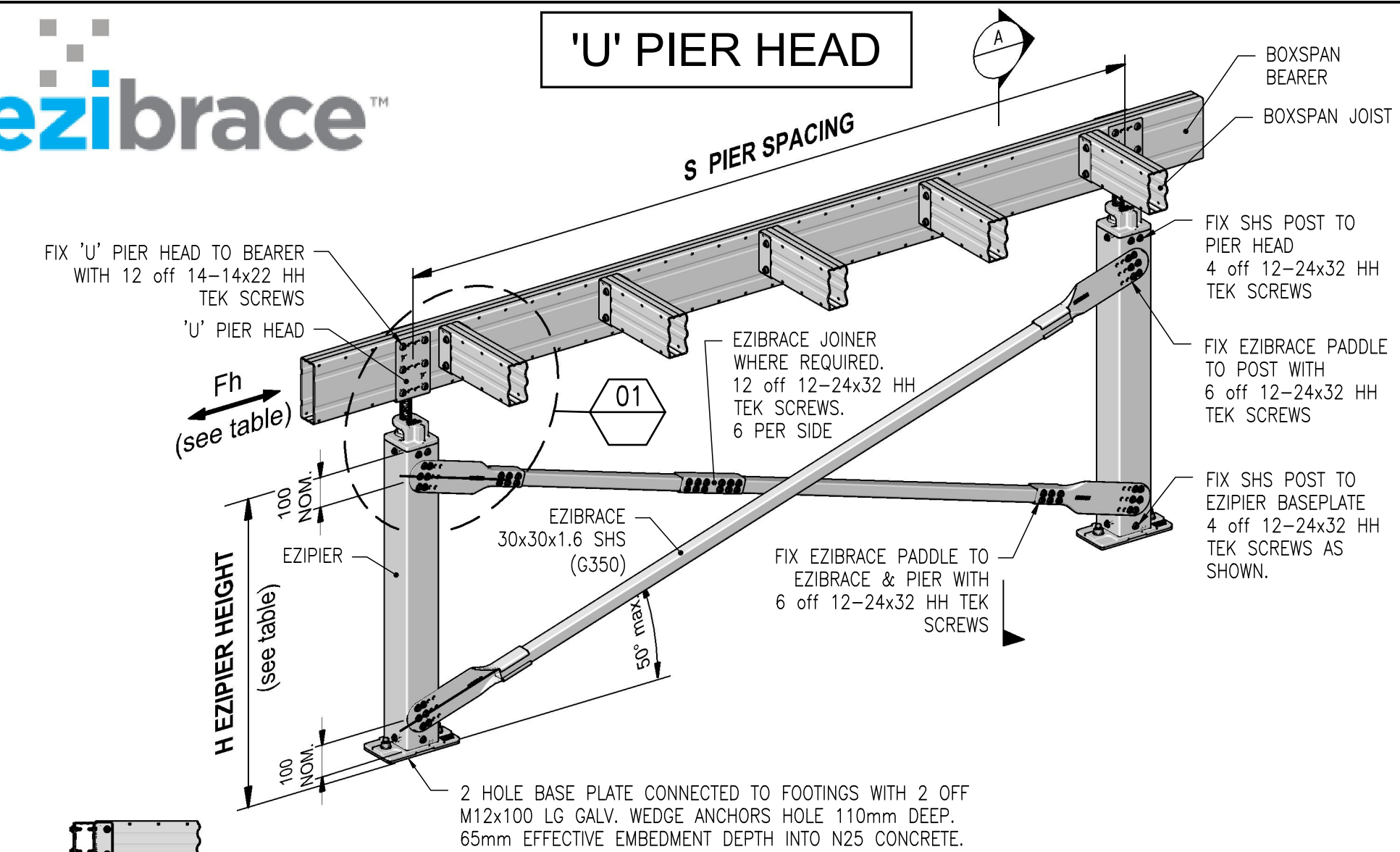


'U' PIER HEAD



STRUCTURAL DESIGN CERTIFICATION

ACN 639-248-114

REF. # 3333
DATE 23/11/2022

SIGNATURE
HA NGUYEN
BE(Hons) PhD MIEAust CPEng NER 4188792
PE0001349 (VIC), RPEQ24385 (QLD), TAS 727649808

* FOR UP TO / INCLUDING 75mm MID POINT ADJUSTMENT SEE TABLE BELOW FOR HORIZONTAL RESISTANCE.
NOTE: AT 102mm MAX. ADJUSTMENT USE 12kN HORIZONTAL RESISTANCE FOR BRACE ANGLES 1-50°.

EZIBRACE ULTIMATE HORIZONTAL RESISTANCE										
2 HOLE BASE PLATE										
Fh - Horizontal Force (Wind Shear) - kN										
Eziplier Height H - m	S Eziplier Spacing - m									
	1.5	1.8	2.1	2.4	2.7	3.0	3.3	3.6	3.9	4.2
0.6	15.6	15.9	16.1	16.3	16.4	16.4	16.5	16.5	16.6	16.6
0.9	14.4	15.0	15.4	15.7	15.9	16.1	16.2	16.3	16.3	16.4
1.2	13.1	14.0	14.6	15.0	15.3	15.6	15.8	15.9	16.0	16.1
1.5	11.9	12.9	13.6	14.2	14.7	15.0	15.3	15.5	15.7	15.8
1.8	10.7	11.9	12.7	13.4	14.0	14.4	14.7	15.0	15.2	15.4
2.1		10.9	11.9	12.6	13.2	13.7	14.2	14.5	14.8	15.0
2.4			11.0	11.9	12.5	13.1	13.6	14.0	14.3	14.6
2.7				11.1	11.9	12.5	13.0	13.4	13.8	14.1
3.0					11.2	11.9	12.4	12.9	13.3	13.6
3.3						11.3	11.9	12.4	12.8	13.2
3.6							10.7	11.3	11.9	12.7
3.9								10.8	11.4	12.3
4.2									10.9	11.9

See Double X Brace BR09-07 when using a U Pier Head & BR09-04 when using a L Pier Head for heights within this area

- NOTES:
- THE LOADS ARE THE ULTIMATE LIMIT CAPACITIES BASED ON THESE STANDARDS: AS1170.1, AS4055, AS4100, AS4600, AS5216. ALL LOADS ARE IN kN AND DIMENSIONS ARE mm
 - THE TABLE GIVES THE MAXIMUM HORIZONTAL WIND FORCE THAT EZIBRACE CAN RESIST TOGETHER WITH THE ACCOMPANYING UPLIFT FOR THE EZIBRACE, A 'U' SHAPED PIERHEAD AND EZIPIER WITH A 2 HOLE BASE PLATE. THE SYSTEM IS SUITABLE FOR ANY NORMAL WIND. THE EZIPIER SOLUTION SHOULD BE CHECKED FOR ANY ADDITIONAL LOADS, ESPECIALLY UPLIFT BY A COMPETENT PERSON. CYCLONIC AND EARTHQUAKE LOADS REQUIRE SPECIFIC DESIGNS.
 - THE EZIBRACE IS SELECTED BASED ON THE ULTIMATE DESIGN LOADS CARRIED TO THE FOOTINGS. THE LOADS IN THE TABLE ARE BASED ON THE STRENGTH OF THE EZIBRACE. THE ULTIMATE TENSION FORCE FOR EZIBRACE IS 18.5kN. THE EZIBRACE IS A SQ STEEL TUBE 30x1.6SHS TO AS1163 - C350LO.
 - BASE PLATES ARE CONNECTED TO THE FOOTING BY 2/M12x100 GALV. WEDGE ANCHORS, HOLE 110 DEEP MIN 65mm EFFECTIVE EMBEDMENT INTO N25 CONCRETE.
 - ULTIMATE MOMENT FOR BASE PLATES:
THE BASE PLATE IS SUFFICIENTLY STRONG SO IT IS NOT THE GOVERNING LIMIT. THE BASE PLATE CONNECTION CAN CARRY THE MOMENTS TRANSFERRED BY THE BRACING INTO THE CONCRETE FOOTING. THE FOOTING SHOULD BE DESIGNED BY AN ENGINEER BASED ON THE LOADS AND SOIL TYPE.
 - THE EZIPIER CAN BE 90x2SHS OR 89x3.5SHS TO AS1163 - C350LO. THE PIER SHOULD BE CHECKED FOR STRENGTH BY AN ENGINEER.
 - FOR PROTECTIVE COATING SYSTEMS REFER TO: NCC VOLUME 2, NASH STANDARD RESIDENTIAL AND LOW-RISE STEEL FRAMING PART 2: DESIGN SOLUTIONS, AS/NZS 4680 HOT-DIP ZINC COATINGS ON FABRICATED FERROUS ARTICLES, AS/NZS 4792 HOLLOW SECTIONS PRODUCED BY WELDING PRE-GALVANIZED STEEL STRIP.
 - BOXSPAN BEARER CAN BE B150, B200, OR B250.
 - SEE DRAWING P04-01 FOR THE EZIPIER WITH 'U' SHAPED PIER HEAD. SEE DRAWING P14 FOR THE 2 AND 4 HOLE BASE PLATE STRENGTH.

D	CERTIFICATION STAMP CHANGED	MR	18/11/22
C	PROTECTIVE COATING NOTE ADDED	MR	11/05/22
REV.	DESCRIPTION	DRN.	DATE

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DESCRIPTION
EZIBRACE SUBFLOOR BRACING SYSTEM
CONNECTION TO U SHAPE EZIPIERS WITH
BOXSPAN FLOOR & 2 HOLE BASE PLATE
(1XU-2)

DRAWING NO. BR09-01	REVISION D
SCALE @ A3 NTS	DRAWN MR
	DATE DRAWN 13/09/21