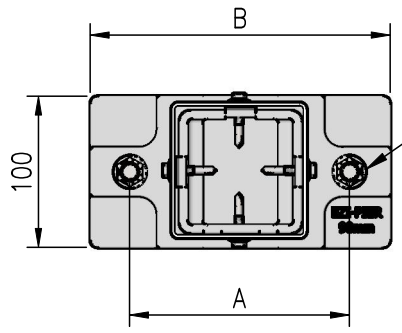
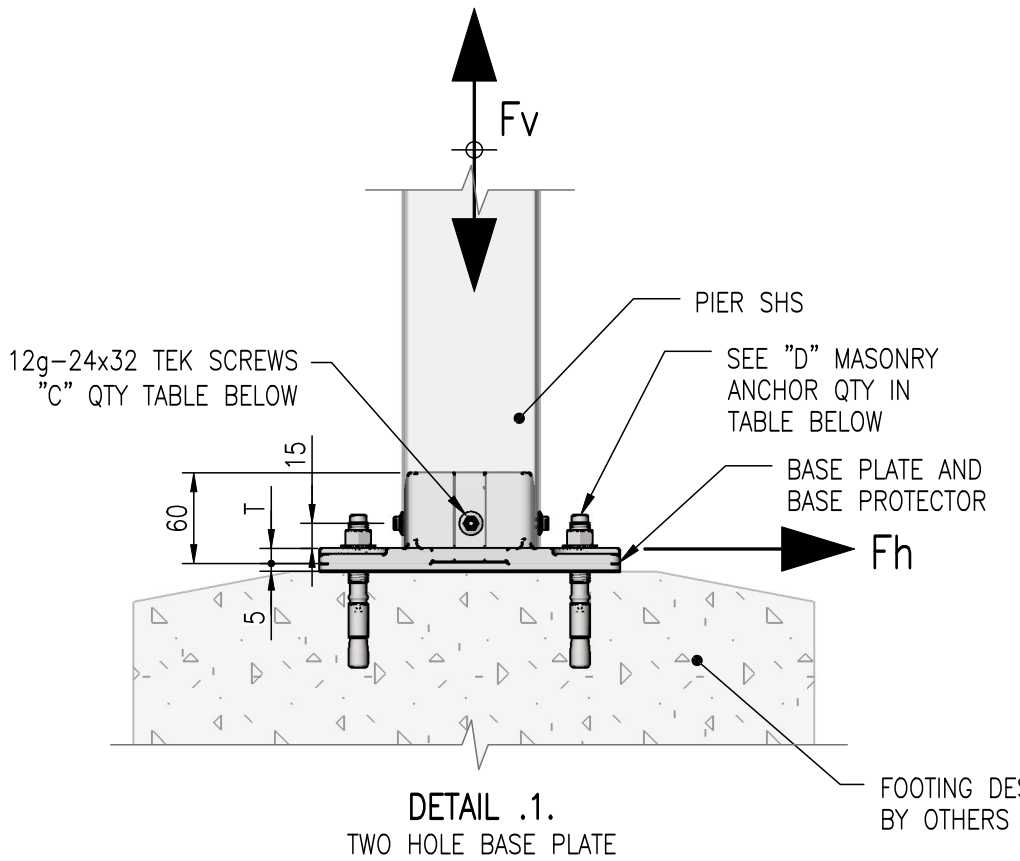
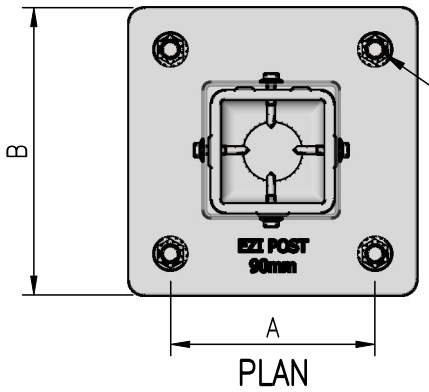


NOMINAL CONNECTION
2/M12x100 LG GALV. WEDGE ANCHORS IN 110mm DEEP HOLE WITH 60mm MIN. EMBEDMENT (AFTER TIGHTENING) IN N25 CONCRETE.

PLAN

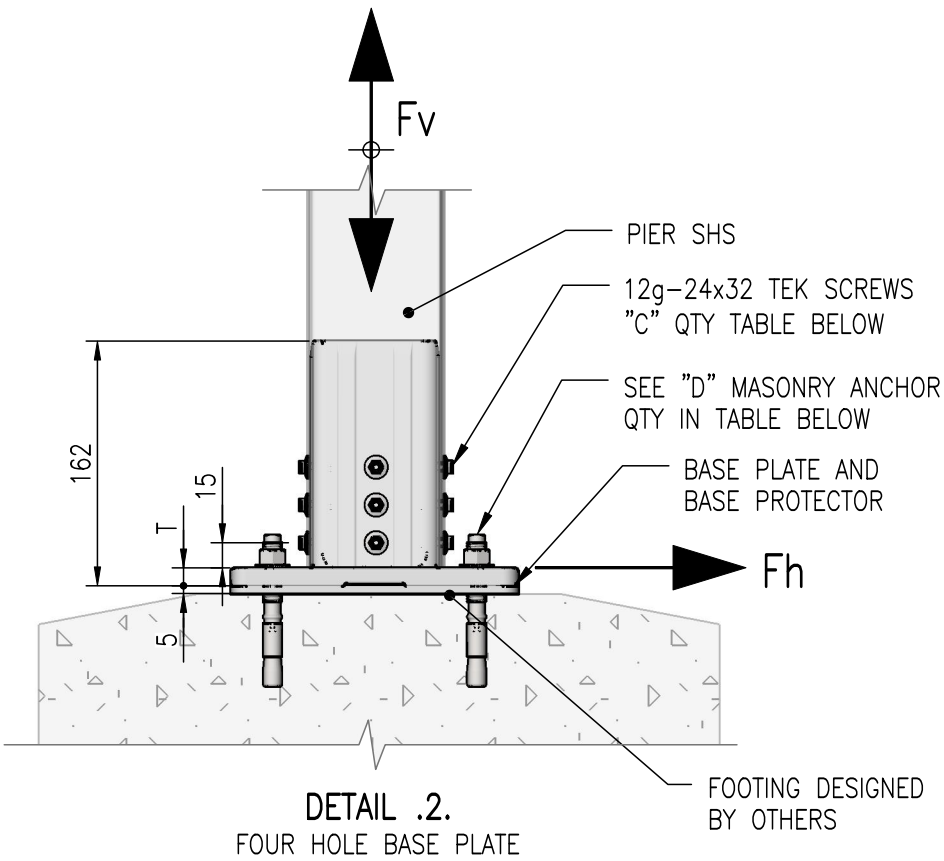


DETAIL .1.
TWO HOLE BASE PLATE
(2HBP)



NOMINAL CONNECTION
4/M12x100 LG GALV. WEDGE ANCHORS IN 110mm DEEP HOLE WITH 60mm MIN. EMBEDMENT (AFTER TIGHTENING) IN N25 CONCRETE.

PLAN



DETAIL .2.
FOUR HOLE BASE PLATE
(4HBP)

BASE PLATE ULTIMATE CAPACITIES (FOR M12x100LG MASONRY ANCHORS)

BASE PLATE	POST SIZE	Fv Up kN	Fv Down kN	Fh kN	A mm	B mm	T mm	C QTY	D QTY
2HBP	75x2.0 SHS	17.3	45	42	146	198	10	4	2
	90x2.0 SHS	17.3	55	42	146	198	10	4	
	89x3.5 SHS	32.0	110	42	146	198	10	4	
	90x2.0 SHS	33.6	55	42	146	198	10	8	
	89x3.5 SHS	33.6	110	42	146	198	10	5	
4HBP	75x2.0 SHS	45.0	45	84	115	155	12	10	4
	90x2.0 SHS	45.0	55	84	135	190	12	10	
	90x2.0 SHS	54.0	55	84	135	190	12	12	
	90x2.0 SHS	67.2	55	84	135	190	12	15	
	89x3.5 SHS	67.2	110	84	135	190	12	9	

DESIGN NOTES

1. THE FORCES IN THE TABLE ARE BASED ON VERTICAL LOADING ONLY. THIS DESIGN DOES NOT TAKE INTO ACCOUNT LOADS FROM HORIZONTAL WIND AND SUBFLOOR BRACING ATTACHED TO THESE PIERS.
2. THE TABLE LISTS ULTIMATE VERTICAL LOAD CAPACITIES FOR THE 2 AND 4 HOLE BASE PLATES (EXCLUDES ANCHORS AND FOOTING DESIGN) AND ARE FOR USE IN NORMAL WIND ONLY AND NOT FOR CYCLONIC WIND CONDITIONS. IT IS ASSUMED THAT THE SUPPORTED FLOOR HAS SUBFLOOR BRACING TO TAKE THE HORIZONTAL WIND.
3. THE ANCHORS USED IN THESE CALCULATIONS ARE THE NOMINAL CONNECTION LISTED ABOVE, THE LISTED CAPACITIES REQUIRE A MIN. 100mm EDGE DISTANCE AND THESE LISTED VALUES CAN BE IMPROVED BY USING STRONGER MASONRY ANCHORS.
4. THE FOLLOWING STANDARDS HAVE BEEN USED IN THE CALCULATIONS: AS4100, AS1170.1, AS4055, AS4600, AS3600.
5. THE POSTS USED INCONJUCTION WITH THE 2 AND 4 HOLE BASE PLATES HAVE A MINIMUM STEEL GRADE OF G350 TO AS1163. THE ULTIMATE DOWNWARD LOAD CAPACITY OF THE BASE PLATE/SHS IS BASED ON A MAXIMUM FFL 2700 (FINISHED FLOOR LEVEL), FOR FLOOR HEIGHTS ABOVE 2700 THE PIER CAPACITY MUST BE CHECKED BY A COMPETANT PERSON.
6. THE BASE PLATE IS MADE FROM DUCTILE CAST IRON WITH A MINIMUM ULTIMATE TENSILE STRENGTH OF 400M MPA CONFORMING TO AS1831–2007 (ISO1083) AND HOT DIPPED GALVANISED TO 450 GSM (GRAMS PER SQUARE METER)
7. CONCRETE USED IN THE CALCULATIONS IS BASED ON A MIN. COMPRESSIVE STRENGTH F'c OF 25MPa.
8. THE TABLES GIVE THE MAXIMUM VERTICAL FORCE DOWN/UP AND MAXIMUM HORIZONTAL FORCE. THE LOADS ARE NOT ALL CONCURRENT I.E. THE MAXIMUM UPLIFT IS NOT AT THE MAXIMUM HORIZONTAL FORCE. THE ACTUAL LOADS SHOULD BE COMBINED AND THE FASTENERS AND MEMBERS RE–CHECKED FOR THE COMBINED FORCES BY A COMPETANT PERSON.
9. THE MOMENT CAPACITY OF THE BASE PLATE IS NOT STATED. IF THERE ARE MOMENTS ON THE PIERS THEN THE DESIGN ENGINEER SHOULD CONFIRM THE PIER AND ITS CONNECTIONS CAN RESIST THE FORCES.
10. THE SUPPORTING FOOTING SHOULD BE SIZED BY THE DESIGN ENGINEER BASED ON THE LOADS AND SOIL TYPE ACCORDING TO THE STANDARD AS2870.
11. SEE DRAWINGS P04–01, P04–03 & P06 FOR PIERHEAD AND PIER SHS DETAILS OR VISIT OUR WEBSITE www.spantec.com.au

STRUCTURAL DESIGN CERTIFICATION

HALINA ENGINEERS
ACN 639-248-114

REF. # 3333
DATE 25/11/2022

SIGNATURE

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

REV.	DESCRIPTION	DRN.	DATE
C	UPLIFT CAPACITIES UPDATED	MR	19/08/22

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DESCRIPTION
EZIPIER 2 AND 4 HOLE BASE PLATES
ULTIMATE CAPACITIES WITHOUT HORIZONTAL LOAD

DRAWING NO. P14

REVISION C

SCALE @ A3 NTS

DRAWN MR

DATE DRAWN 17/11/22