

NOTES:
 CORE STEEL TO BE A572 GR50 OR EQUIVALENT
 OTHER PLATE STEEL TO BE A572 GR50 OR EQUIVALENT
 ALL WELDS TO SATISFY AISC DEMANDS CRITICAL AWS E71T8

NCREE Buckling-Restrained Braced Frame Pseudo Dynamic Test

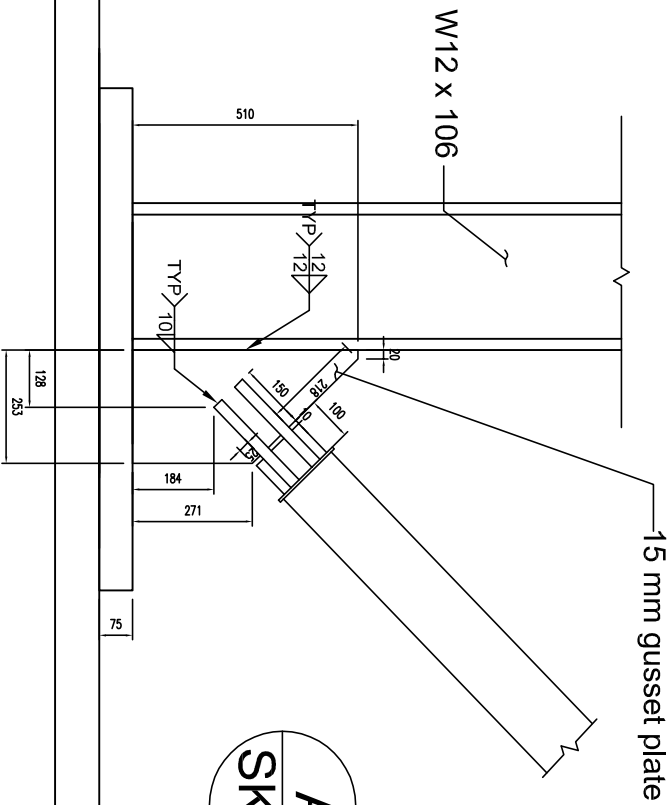
design and draw: Pao-Chun Lin 林保均

Date: 4/22/2010 Contact: 0910-051-356

BRBF SK-1

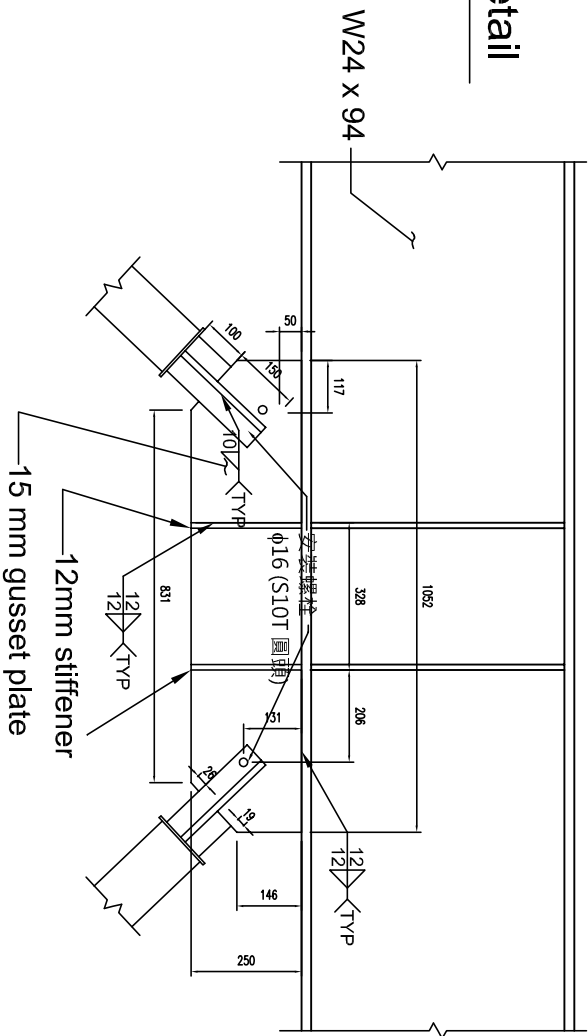
B
SK-2

Gusset Plate Detail



A
SK-2

Gusset Plate Detail



NOTES:

CORE STEEL TO BE A572 GR50 DR EQUIVALENT
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NCRREE Buckling-Restrained Braced Frame Pseudo Dynamic Test

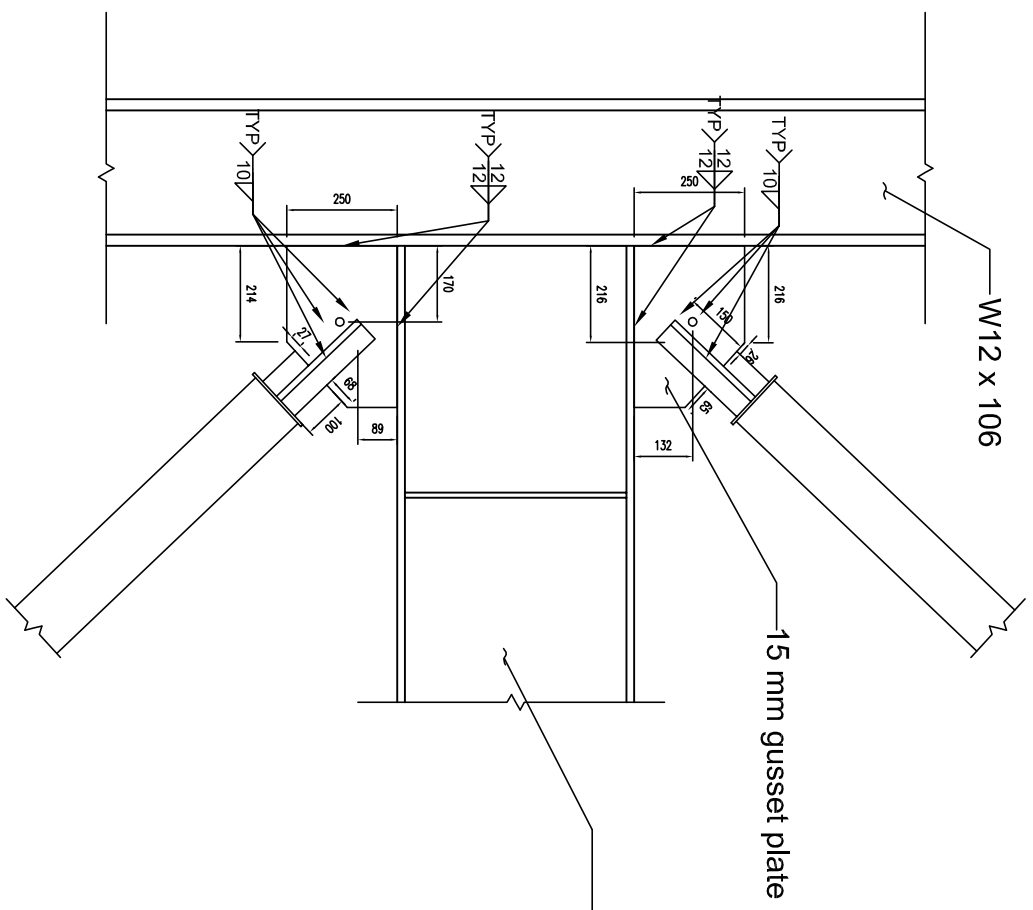
design and draw: Pao-Chun Lin 林保均

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BRBF SK-2

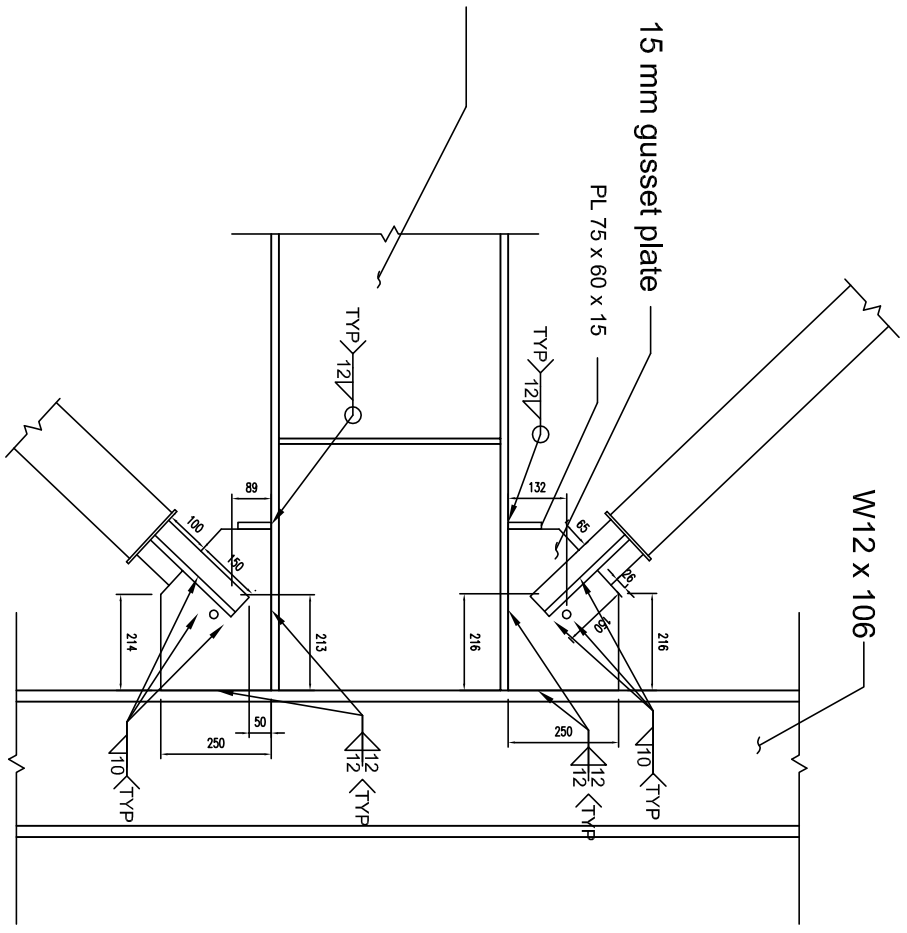
A
SK-3

Gusset Plate Detail



B
SK-3

Gusset Plate Detail



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NCRREE Buckling-Restrained Braced Frame Pseudo Dynamic Test

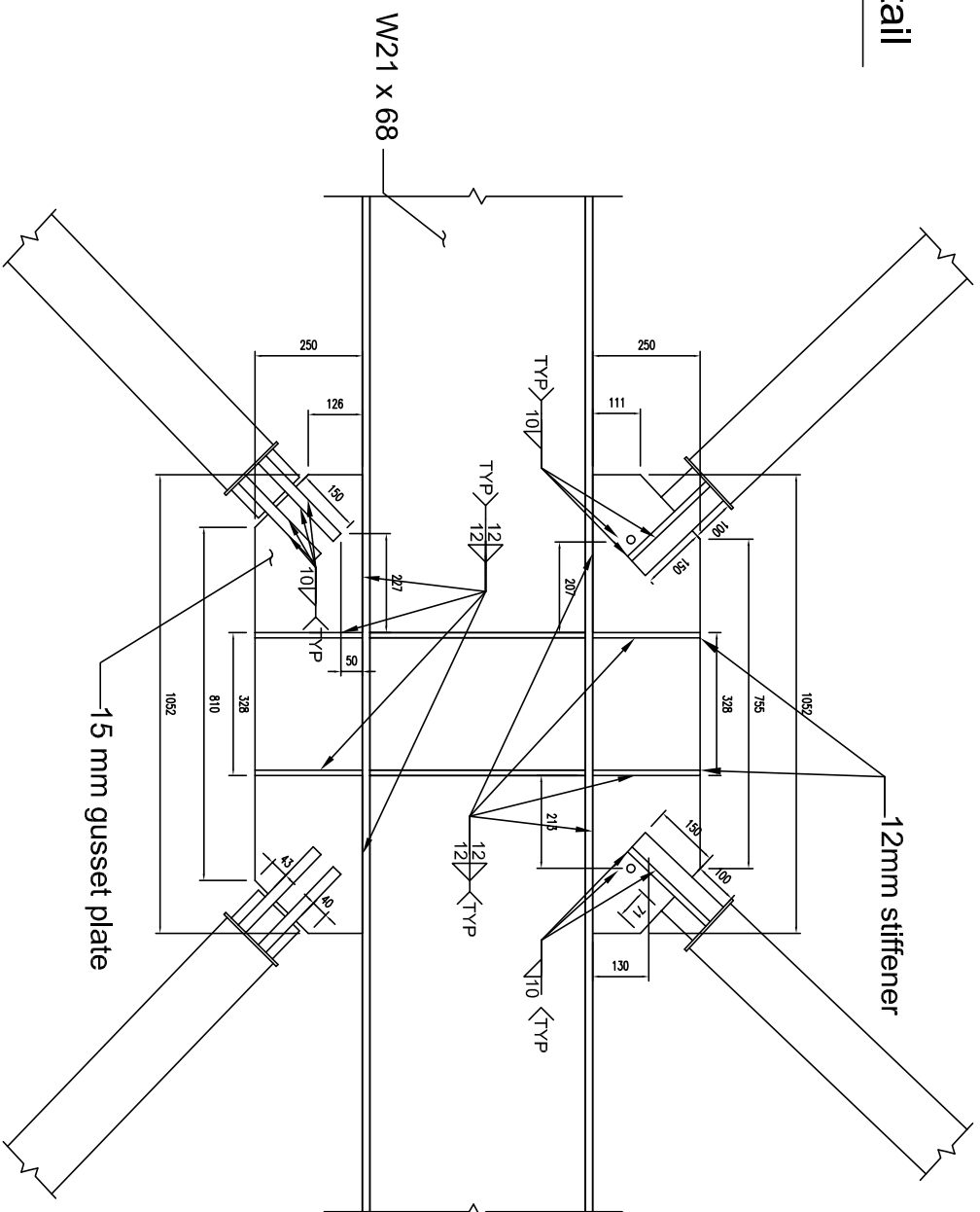
design and draw: Pao-Chun Lin 林保均

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BRBF SK-3

A
SK-4

Gusset Plate Detail



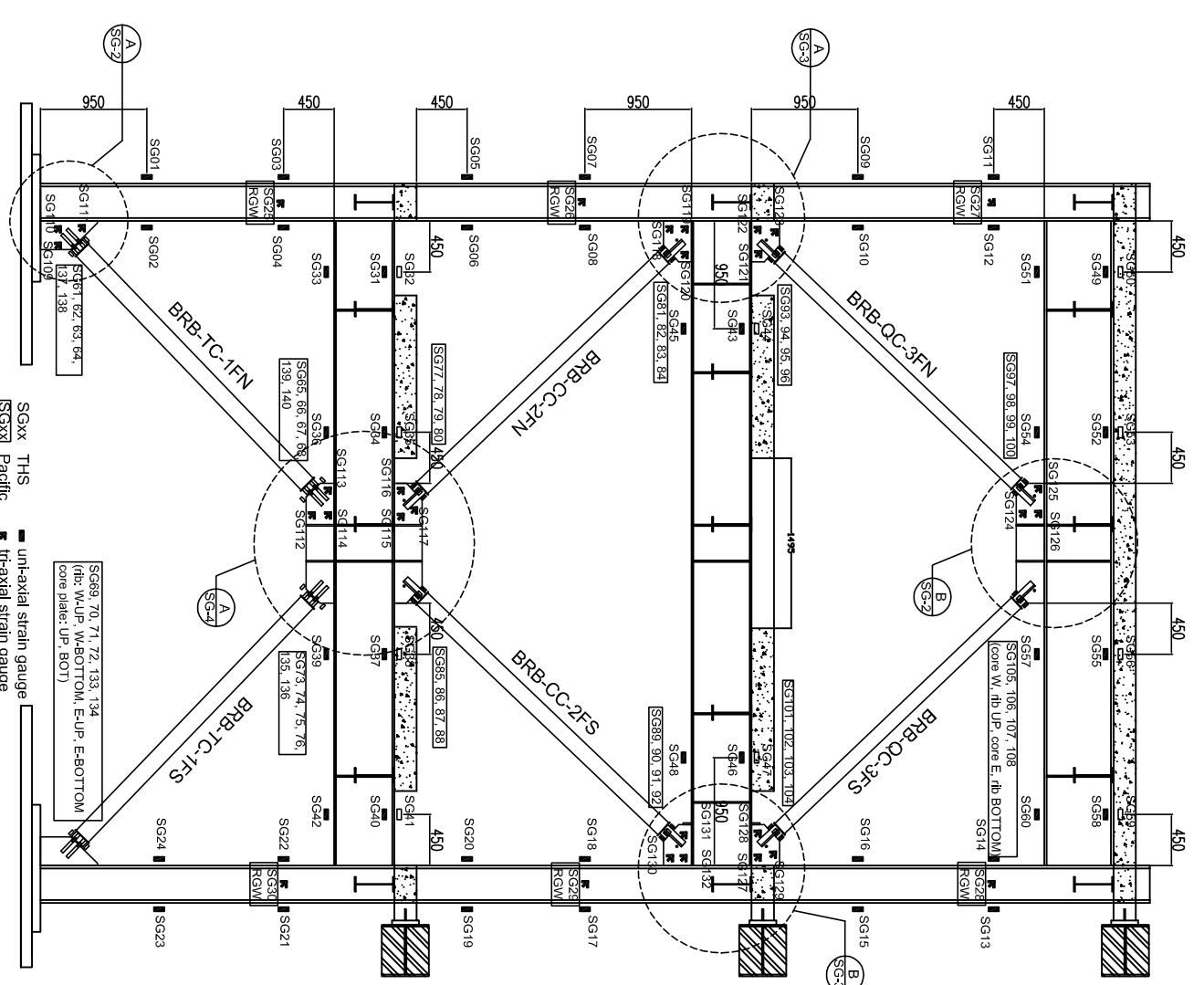
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NCRÉE Buckling-Restrained Braced Frame Pseudo Dynamic Test

design and draw: Pao-Chun Lin 林保均

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BRBF SK-4



SGxx THS ■ uni-axial strain gauge
 SGxx Pacific ■ tri-axial strain gauge

SG69, 70, 71, 72, 133, 134
 (Iris: W-UP, W-BOTTOM, E-UP, E-BOTTOM
 core plate; UP, BOT)

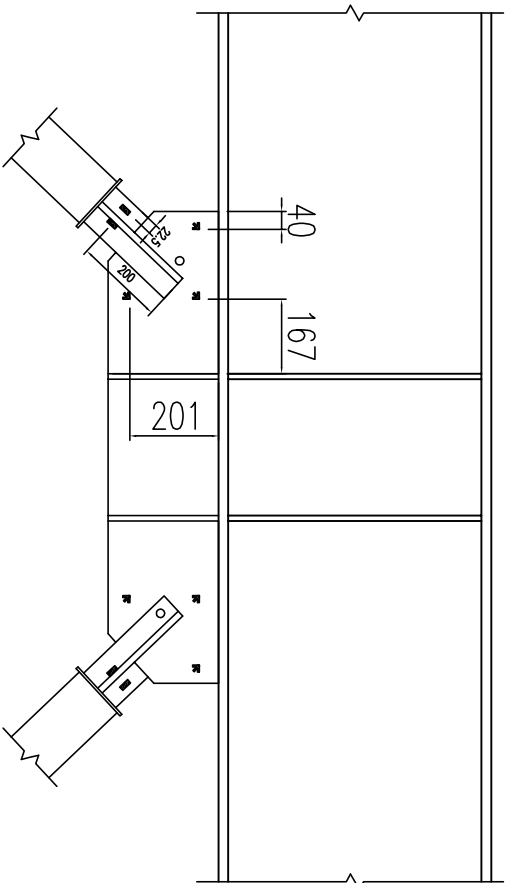
gauge no.	type	location	date acquisition	gauge no.	type	location	date acquisition	gauge no.	type	location	date acquisition
SG9	uni-axial	lower beam	THS	SG80	uni-axial	2F S column	THS	SG13	R	upper gusset	THS
SG10	uni-axial	IF N column	THS	SG81	uni-axial	2F S column	THS	SG14	R	upper gusset	THS
SG11	uni-axial	IF N column	THS	SG82	uni-axial	2F S column	THS	SG15	R	upper gusset	THS
SG12	uni-axial	IF N column	THS	SG83	uni-axial	2F S column	THS	SG16	R	upper gusset	THS
SG13	uni-axial	IF N column	THS	SG84	uni-axial	2F S column	THS	SG17	R	upper gusset	THS
SG14	uni-axial	IF N column	THS	SG85	uni-axial	2F S column	THS	SG18	R	upper gusset	THS
SG15	uni-axial	IF N column	THS	SG86	uni-axial	2F S column	THS	SG19	R	upper gusset	THS
SG16	uni-axial	IF N column	THS	SG87	uni-axial	2F S column	THS	SG20	R	upper gusset	THS
SG17	uni-axial	IF N column	THS	SG88	uni-axial	2F S column	THS	SG21	R	upper gusset	THS
SG18	uni-axial	IF N column	THS	SG89	uni-axial	2F S column	THS	SG22	R	upper gusset	THS
SG19	uni-axial	IF N column	THS	SG90	uni-axial	2F S column	THS	SG23	R	upper gusset	THS
SG20	uni-axial	IF N column	THS	SG91	uni-axial	2F S column	THS	SG24	R	upper gusset	THS
SG21	uni-axial	IF N column	THS	SG92	uni-axial	2F S column	THS	SG25	R	upper gusset	THS
SG22	uni-axial	IF N column	THS	SG93	uni-axial	2F S column	THS	SG26	R	upper gusset	THS
SG23	uni-axial	IF N column	THS	SG94	uni-axial	2F S column	THS	SG27	R	upper gusset	THS
SG24	uni-axial	IF N column	THS	SG95	uni-axial	2F S column	THS	SG28	R	upper gusset	THS
SG25	uni-axial	IF N column	THS	SG96	uni-axial	2F S column	THS	SG29	R	upper gusset	THS
SG26	uni-axial	IF N column	THS	SG97	uni-axial	2F S column	THS	SG30	R	upper gusset	THS
SG27	uni-axial	IF N column	THS	SG98	uni-axial	2F S column	THS	SG31	R	upper gusset	THS
SG28	uni-axial	IF N column	THS	SG99	uni-axial	2F S column	THS	SG32	R	upper gusset	THS
SG29	uni-axial	IF N column	THS	SG100	uni-axial	2F S column	THS	SG33	R	upper gusset	THS
SG30	uni-axial	IF N column	THS	SG101	uni-axial	2F S column	THS	SG34	R	upper gusset	THS
SG31	uni-axial	IF N column	THS	SG102	uni-axial	2F S column	THS	SG35	R	upper gusset	THS
SG32	uni-axial	IF N column	THS	SG103	uni-axial	2F S column	THS	SG36	R	upper gusset	THS
SG33	uni-axial	IF N column	THS	SG104	uni-axial	2F S column	THS	SG37	R	upper gusset	THS
SG34	uni-axial	IF N column	THS	SG105	uni-axial	2F S column	THS	SG38	R	upper gusset	THS
SG35	uni-axial	IF N column	THS	SG106	uni-axial	2F S column	THS	SG39	R	upper gusset	THS
SG36	uni-axial	IF N column	THS	SG107	uni-axial	2F S column	THS	SG40	R	upper gusset	THS
SG37	uni-axial	IF N column	THS	SG108	uni-axial	2F S column	THS	SG41	R	upper gusset	THS
SG38	uni-axial	IF N column	THS	SG109	uni-axial	2F S column	THS	SG42	R	upper gusset	THS
SG39	uni-axial	IF N column	THS	SG110	uni-axial	2F S column	THS	SG43	R	upper gusset	THS
SG40	uni-axial	IF N column	THS	SG111	uni-axial	2F S column	THS	SG44	R	upper gusset	THS
SG41	uni-axial	IF N column	THS	SG112	uni-axial	2F S column	THS	SG45	R	upper gusset	THS
SG42	uni-axial	IF N column	THS	SG113	uni-axial	2F S column	THS	SG46	R	upper gusset	THS
SG43	uni-axial	IF N column	THS	SG114	uni-axial	2F S column	THS	SG47	R	upper gusset	THS
SG44	uni-axial	IF N column	THS	SG115	uni-axial	2F S column	THS	SG48	R	upper gusset	THS
SG45	uni-axial	IF N column	THS	SG116	uni-axial	2F S column	THS	SG49	R	upper gusset	THS
SG46	uni-axial	IF N column	THS	SG117	uni-axial	2F S column	THS	SG50	R	upper gusset	THS
SG47	uni-axial	IF N column	THS	SG118	uni-axial	2F S column	THS	SG51	R	upper gusset	THS
SG48	uni-axial	IF N column	THS	SG119	uni-axial	2F S column	THS	SG52	R	upper gusset	THS
SG49	uni-axial	IF N column	THS	SG120	uni-axial	2F S column	THS	SG53	R	upper gusset	THS
SG50	uni-axial	IF N column	THS	SG121	uni-axial	2F S column	THS	SG54	R	upper gusset	THS
SG51	uni-axial	IF N column	THS	SG122	uni-axial	2F S column	THS	SG55	R	upper gusset	THS
SG52	uni-axial	IF N column	THS	SG123	uni-axial	2F S column	THS	SG56	R	upper gusset	THS
SG53	uni-axial	IF N column	THS	SG124	uni-axial	2F S column	THS	SG57	R	upper gusset	THS
SG54	uni-axial	IF N column	THS	SG125	uni-axial	2F S column	THS	SG58	R	upper gusset	THS
SG55	uni-axial	IF N column	THS	SG126	uni-axial	2F S column	THS	SG59	R	upper gusset	THS
SG56	uni-axial	IF N column	THS	SG127	uni-axial	2F S column	THS	SG60	R	upper gusset	THS
SG57	uni-axial	IF N column	THS	SG128	uni-axial	2F S column	THS	SG61	R	upper gusset	THS
SG58	uni-axial	IF N column	THS	SG129	uni-axial	2F S column	THS	SG62	R	upper gusset	THS
SG59	uni-axial	IF N column	THS	SG130	uni-axial	2F S column	THS	SG63	R	upper gusset	THS
SG60	uni-axial	IF N column	THS	SG131	uni-axial	2F S column	THS	SG64	R	upper gusset	THS
SG61	uni-axial	IF N column	THS	SG132	uni-axial	2F S column	THS	SG65	R	upper gusset	THS
SG62	uni-axial	IF N column	THS	SG133	uni-axial	2F S column	THS	SG66	R	upper gusset	THS
SG63	uni-axial	IF N column	THS	SG134	uni-axial	2F S column	THS	SG67	R	upper gusset	THS

NCREE Buckling-Restrained Braced Frame Pseudo Dynamic Test
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BRBF SG

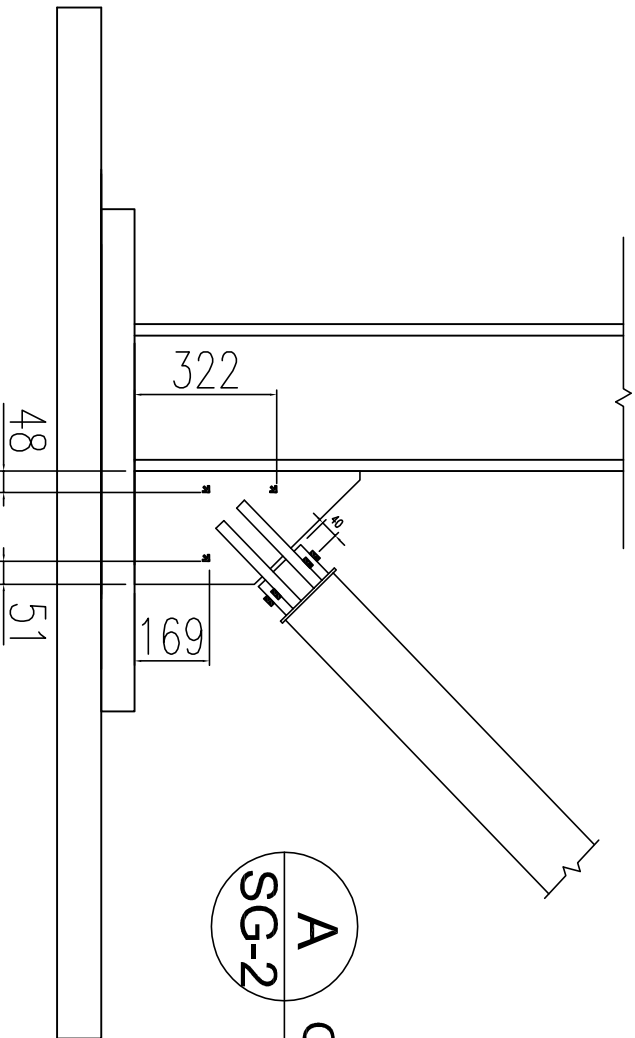
B
SG-2

Gusset Plate Detail



A
SG-2

Gusset Plate Detail



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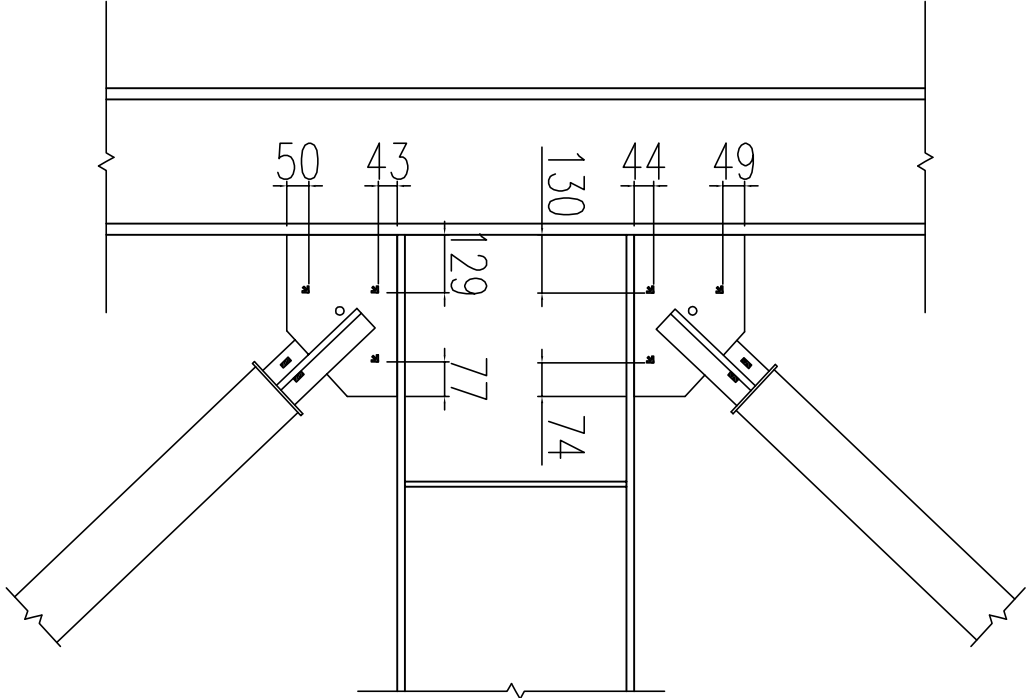
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BRBF SG-2

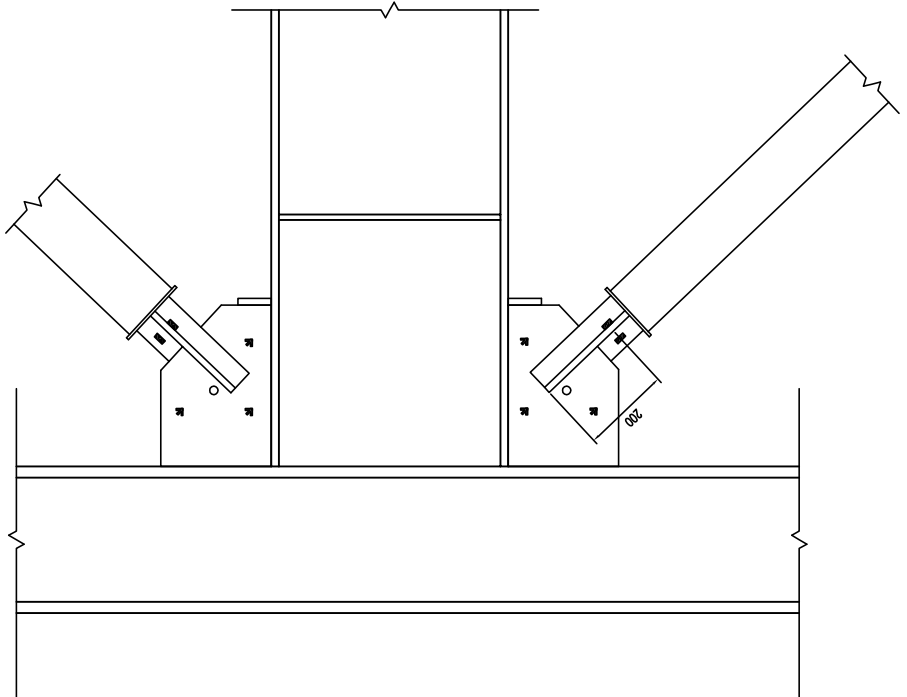
A
SG-3

Gusset Plate Detail



B
SG-3

Gusset Plate Detail



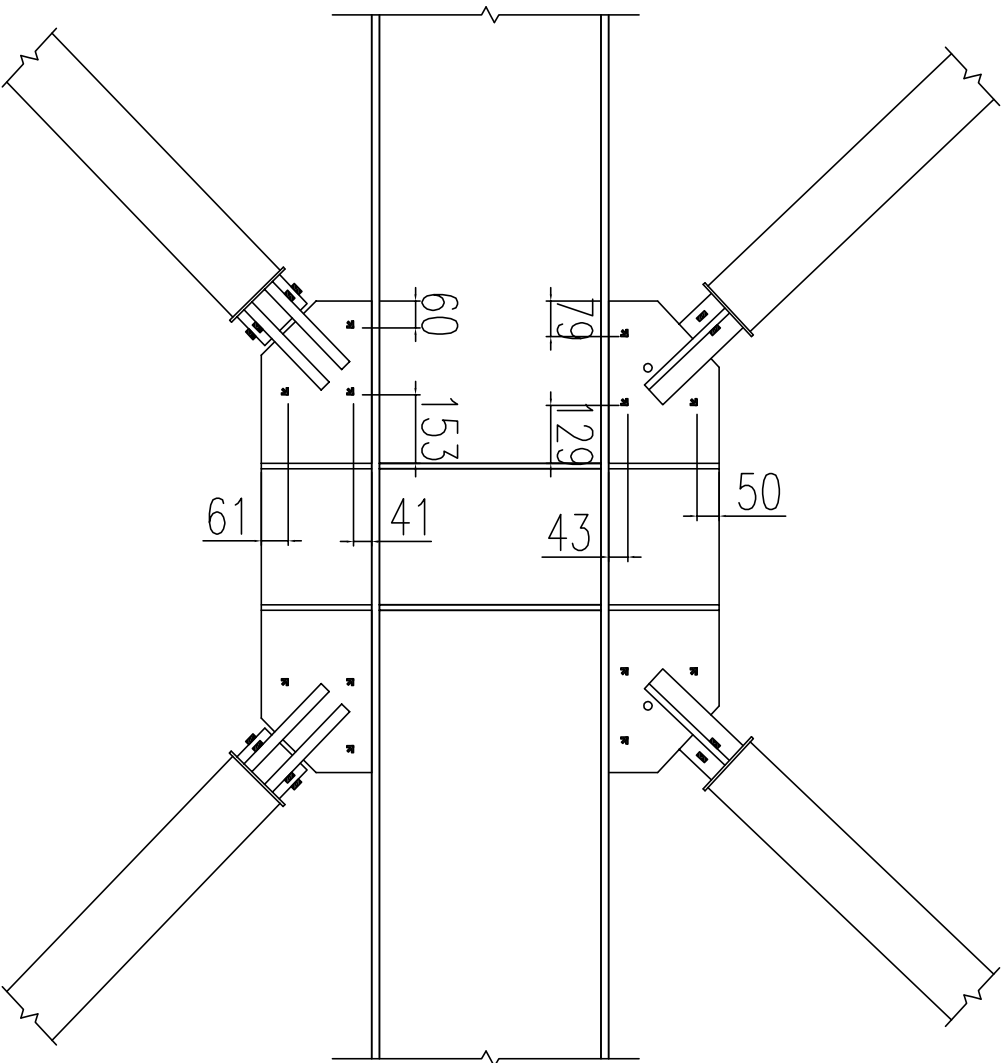
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BRBF SG-3

A
SG-4

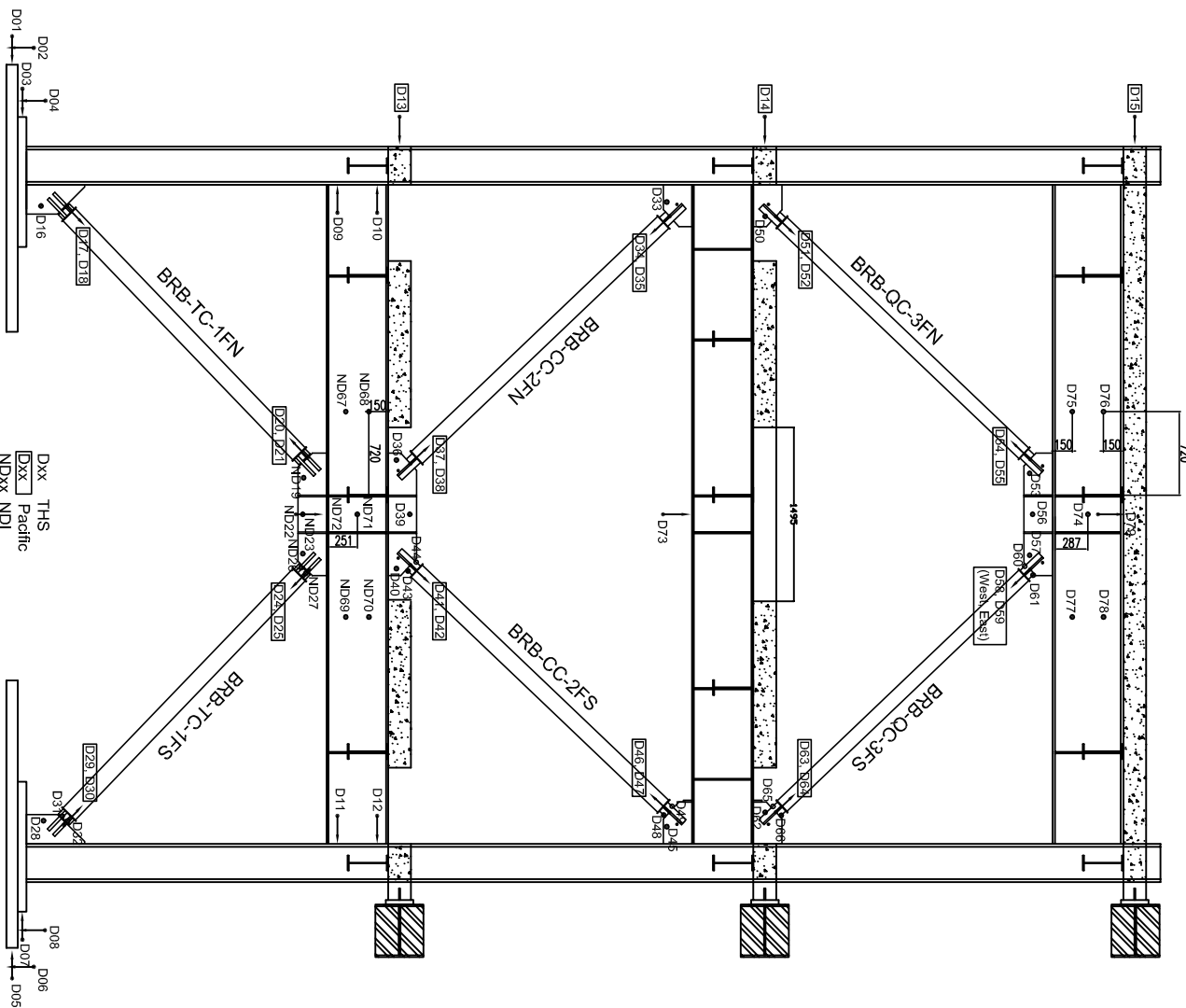
Gusset Plate Detail



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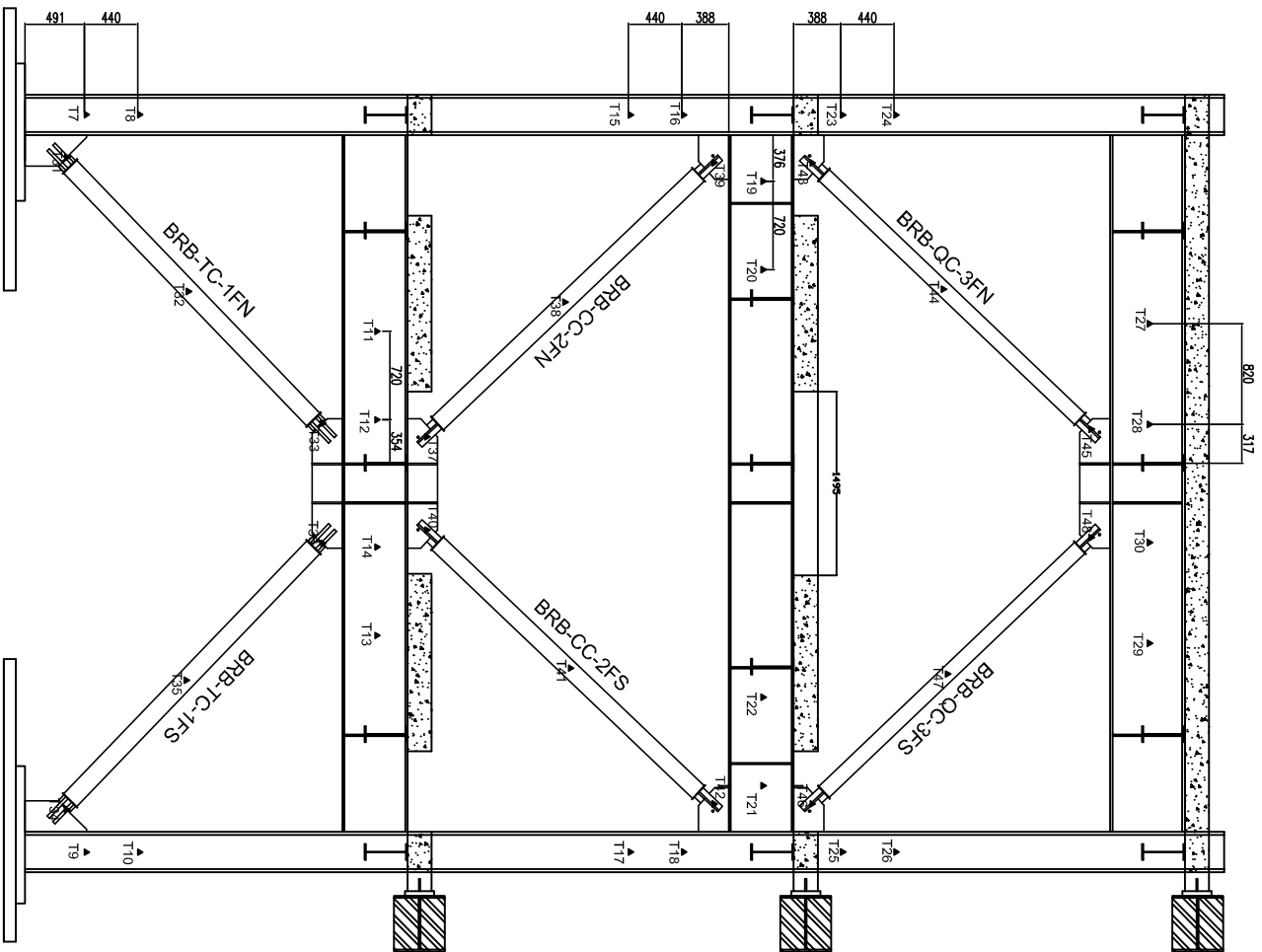
BRBF SG-4



gauge no.	type	location	data acquisition	gauge no.	type	location	data acquisition
ND99	LVDIT	lower beam N	THS	ND39	LVDIT	2F lower gusset	THS
ND10	LVDIT	lower rotation N	THS	ND40	LVDIT	2F middle DDP	THS
ND11	LVDIT	lower beam S	THS	ND41	LVDIT	2F S BRB lower	Pacific
ND12	LVDIT	lower beam S rotation	THS	ND42	LVDIT	2F S BRB lower	Pacific
ND13	temposonics	lower beam	THS	ND43	LVDIT	2F S BRB lower	THS
ND14	temposonics	lower slab E	Pacific	ND44	LVDIT	2F S BRB lower	THS
ND15	temposonics	anchon plate N slip	THS	ND45	LVDIT	2F S BRB lower	THS
ND16	temposonics	anchon plate N slip	THS	ND46	LVDIT	2F S BRB upper	Pacific
ND17	temposonics	base plate N uplift	THS	ND47	LVDIT	2F S BRB upper	Pacific
ND18	temposonics	base plate N uplift	THS	ND48	LVDIT	2F S BRB upper	THS
ND19	temposonics	base plate S slip	THS	ND49	LVDIT	2F S BRB upper	THS
ND20	temposonics	base plate S slip	THS	ND50	LVDIT	3F N lower gusset	THS
ND21	temposonics	base plate S uplift	THS	ND51	LVDIT	3F N BRB lower	Pacific
ND22	temposonics	base plate S uplift	THS	ND52	LVDIT	3F N BRB lower	Pacific
ND23	temposonics	lower slab W	Pacific	ND53	LVDIT	3F N upper	THS
ND24	temposonics	middle slab E	Pacific	ND54	LVDIT	3F N BRB upper	Pacific
ND25	temposonics	middle slab W	Pacific	ND55	LVDIT	3F N BRB upper	Pacific
ND26	temposonics	upper slab E	Pacific	ND56	LVDIT	3F middle DDP	THS
ND27	temposonics	upper slab W	Pacific	ND57	LVDIT	3F S upper gusset DDP	THS
ND28	LVDIT	IF N lower	THS	ND58	LVDIT	3F S BRB upper	Pacific
ND29	LVDIT	IF N BRB lower end	Pacific	ND59	LVDIT	3F S BRB upper	Pacific
ND30	LVDIT	IF N BRB lower end	Pacific	ND60	LVDIT	3F S BRB upper	THS
ND31	LVDIT	IF N BRB lower end	Pacific	ND61	LVDIT	3F end rotation	THS
ND32	LVDIT	IF S BRB upper end	Pacific	ND62	LVDIT	3F S lower gusset	THS
ND33	LVDIT	IF S BRB upper end	Pacific	ND63	LVDIT	3F S lower	Pacific
ND34	LVDIT	IF S BRB upper end	Pacific	ND64	LVDIT	3F S BRB lower	Pacific
ND35	LVDIT	IF S BRB upper end	Pacific	ND65	LVDIT	3F S BRB lower	THS
ND36	LVDIT	IF S BRB upper end	Pacific	ND66	LVDIT	3F S BRB lower	THS
ND37	LVDIT	IF S BRB upper end	Pacific	ND67	LVDIT	3F S BRB lower	THS
ND38	LVDIT	IF S BRB upper end	Pacific	ND68	LVDIT	3F S BRB lower	THS
ND39	LVDIT	IF S BRB upper end	Pacific	ND69	LVDIT	3F S BRB lower	THS
ND40	LVDIT	IF S BRB upper end	Pacific	ND70	LVDIT	3F S BRB lower	THS
ND41	LVDIT	IF S BRB upper end	Pacific	ND71	LVDIT	3F S BRB lower	THS
ND42	LVDIT	IF S BRB upper end	Pacific	ND72	LVDIT	3F S BRB lower	THS
ND43	LVDIT	IF S BRB upper end	Pacific	ND73	LVDIT	3F S BRB lower	THS
ND44	LVDIT	IF S BRB upper end	Pacific	ND74	LVDIT	3F S BRB lower	THS
ND45	LVDIT	IF S BRB upper end	Pacific	ND75	LVDIT	3F S BRB lower	THS
ND46	LVDIT	IF S BRB upper end	Pacific	ND76	LVDIT	3F S BRB lower	THS
ND47	LVDIT	IF S BRB upper end	Pacific	ND77	LVDIT	3F S BRB lower	THS
ND48	LVDIT	IF S BRB upper end	Pacific	ND78	LVDIT	3F S BRB lower	THS
ND49	LVDIT	IF S BRB upper end	Pacific	ND79	LVDIT	3F S BRB lower	THS
ND50	LVDIT	IF S BRB upper end	Pacific				

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BRBF disp. meter



gauge no.	type	location	data acquisition	gauge no.	type	location	data acquisition
T01	tiltmet er	lower slab SE	THS	T25	tiltmeter	3F S column	THS
T02	tiltmet er	lower slab SW	THS	T26	tiltmeter	3F S column	THS
T03	tiltmet er	middle slab SE	THS	T27	tiltmeter	upper beam	THS
T04	tiltmet er	middle slab SW	THS	T28	tiltmeter	upper beam	THS
T05	tiltmet er	upper slab SE	THS	T29	tiltmeter	upper beam	THS
T06	tiltmet er	upper slab SW	THS	T30	tiltmeter	upper beam	THS
T07	tiltmet er	IF N column	THS	T31	tiltmeter	1F N BRB lower end	THS
T08	tiltmet er	IF N column	THS	T32	tiltmeter	1F N BRB middle end	THS
T09	tiltmet er	IF S column	THS	T33	tiltmeter	1F N BRB upper end	THS
T10	tiltmet er	IF S column	THS	T34	tiltmeter	1F S BRB lower end	THS
T11	tiltmet er	lower beam	THS	T35	tiltmeter	1F S BRB middle end	THS
T12	tiltmet er	lower beam	THS	T36	tiltmeter	1F S BRB upper end	THS
T13	tiltmet er	lower beam	THS	T37	tiltmeter	2F N BRB lower end	THS
T14	tiltmet er	lower beam	THS	T38	tiltmeter	2F N BRB middle end	THS
T15	tiltmet er	2F N column	THS	T39	tiltmeter	2F N BRB upper end	THS
T16	tiltmet er	2F N column	THS	T40	tiltmeter	2F S BRB lower end	THS
T17	tiltmet er	2F S column	THS	T41	tiltmeter	2F S BRB middle end	THS
T18	tiltmet er	2F S column	THS	T42	tiltmeter	2F S BRB upper end	THS
T19	tiltmet er	middle beam	THS	T43	tiltmeter	3F N BRB lower end	THS
T20	tiltmet er	middle beam	THS	T44	tiltmeter	3F N BRB middle end	THS
T21	tiltmet er	middle beam	THS	T45	tiltmeter	3F N BRB upper end	THS
T22	tiltmet er	middle beam	THS	T46	tiltmeter	3F S BRB lower end	THS
T23	tiltmet er	3F N column	THS	T47	tiltmeter	3F S BRB middle end	THS
T24	tiltmet er	3F N column	THS	T48	tiltmeter	3F S BRB upper end	THS

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BRBF tiltmeter