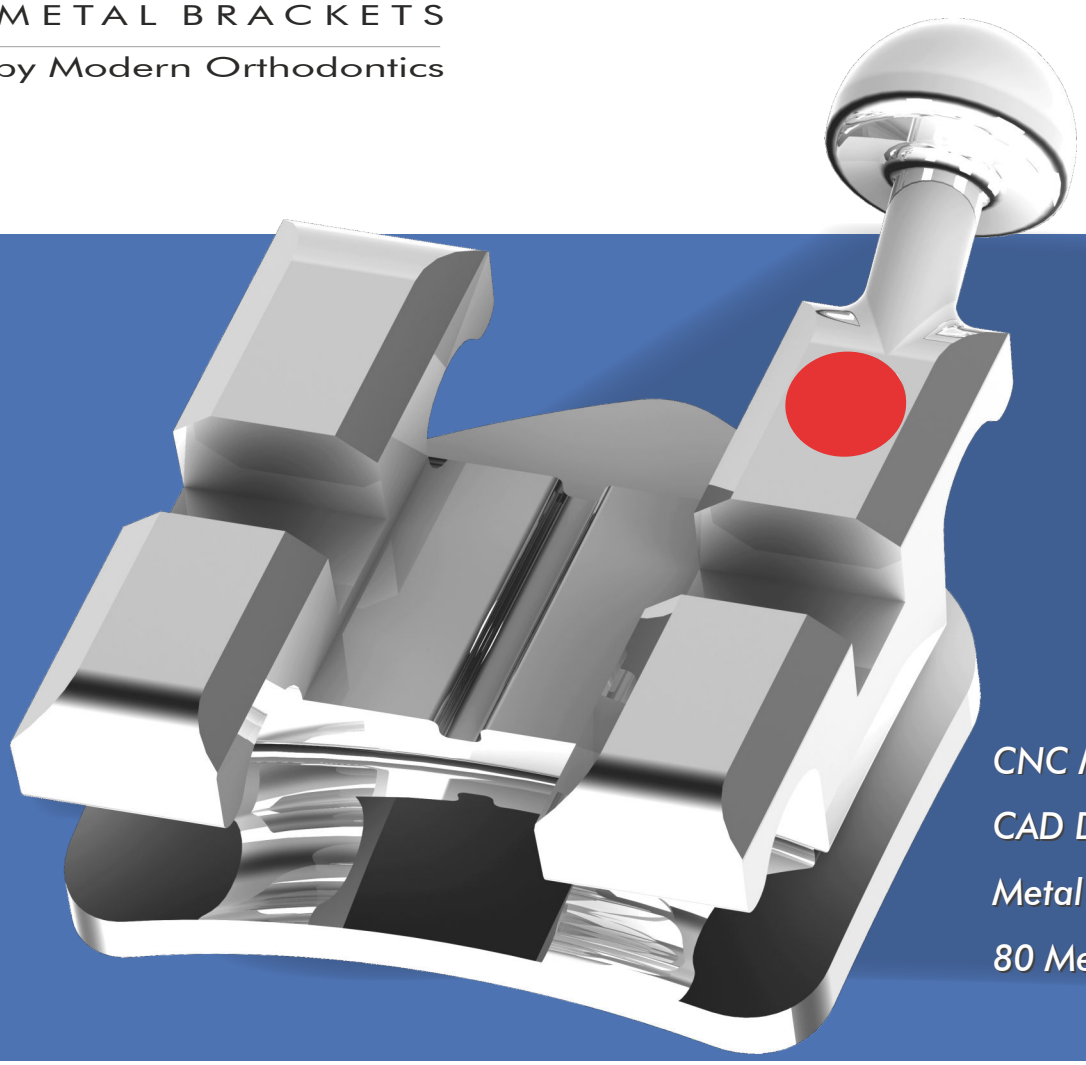
SAPPHIRE™

TRUE TWIN MIM

METAL BRACKETS

by Modern Orthodontics



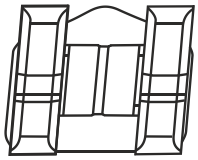
CNC Milled Slot

CAD Design

Metal Injection Molded

80 Mesh Pad





Modern Orthodontics



SAPPHIRE™
TRUE TWIN MIM
METAL BRACKET SYSTEM

SAPPHIRE™
METAL BRACKET SYSTEM

True Twin Two-Piece Bracket
with four tie wing design and
time tested 80 mesh.

Metal Injection Moulded (MIM)

for intricate,
and smooth design.

Low Profile Design

for comfort and minimum occlusal
interferences.

CNC Milled Slot

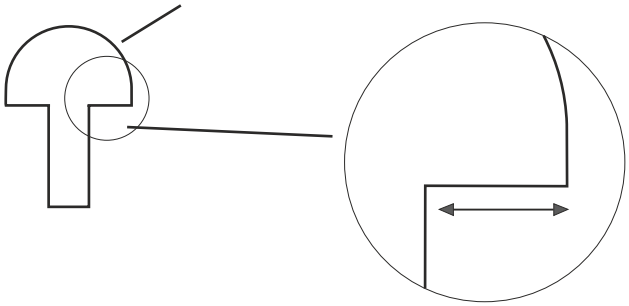
for
precision and smoothness

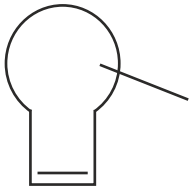


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METAL BRACKET SYSTEM

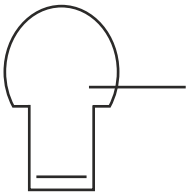
SecureLok Hooks

Offer best locking of chains and accessories.
Due to thinnest hook stem design large amount undercut is present beneath the half round ball of hook and chains will not slip out in between the patient appointments.

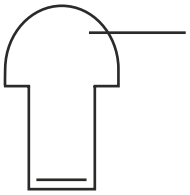




Full Round Hook on other brackets offer no resistence to dislodgement of chains



Half Round Hook with less
under cut area again allows slippage of E-chain



Better than above two but still not enough locking due to thick stem of hook



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TRUE TWIN MIM

METAL BRACKET SYSTEM

Advanced 17-4 low nickel alloy
for maximum strength in thinnest walls and zero slot collapse.

Exact in - out dimensions.

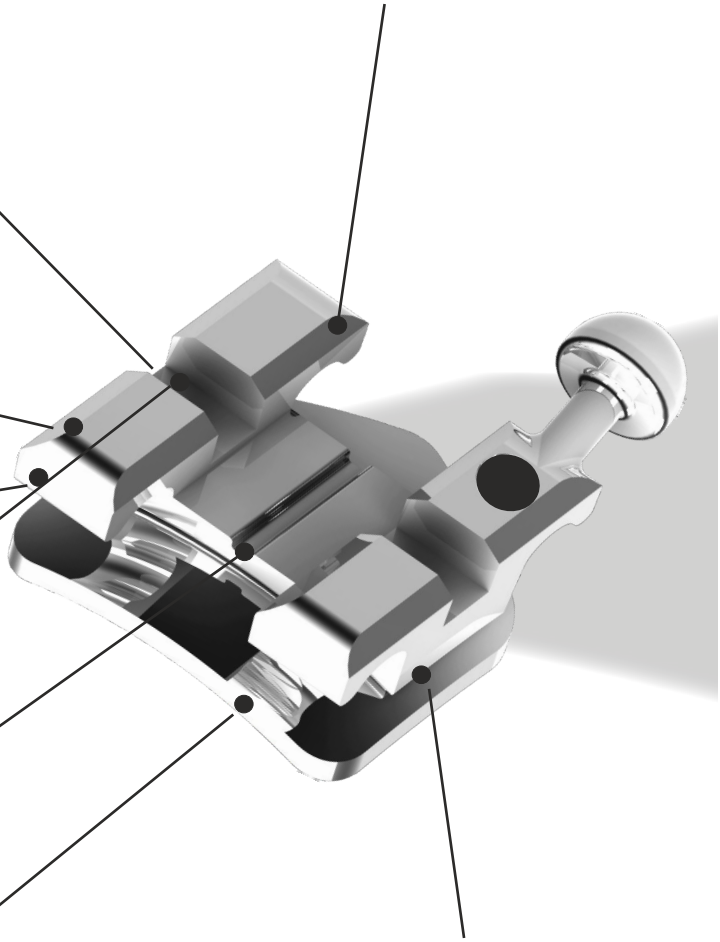
ZeroF ultra low friction slot
Advanced polishing process creates mirror finish by removing high surface peaks at molecular level.

Beveled tie wings
to reduce the bracket visibility from front without compromising on strength.

Rounded tie wings
for patient comfort.

CNC milled slot
for precision and smoothness.

Centre scribe line
for accurate bracket placement in line with the long axis of tooth.



80 Gauge mesh pad
Compound contoured diagonal mesh pad for maximum bonding strength and zero rocking.



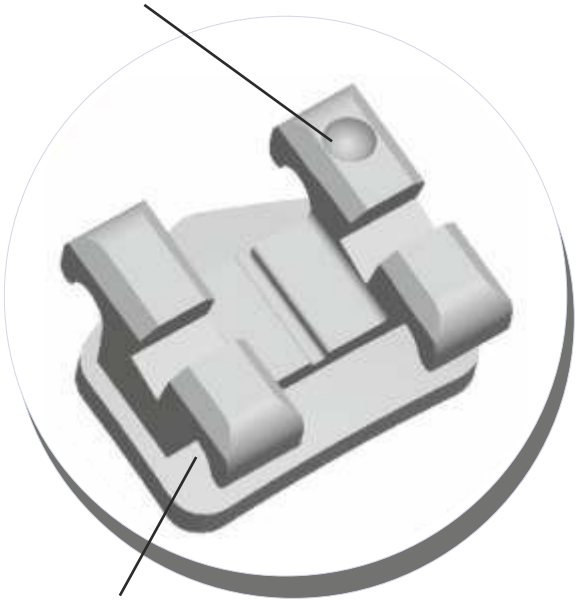
Palladium alloy braze
assures strongest possible brazed joint and resists electrolytic reaction that can cause brazing failure during use.



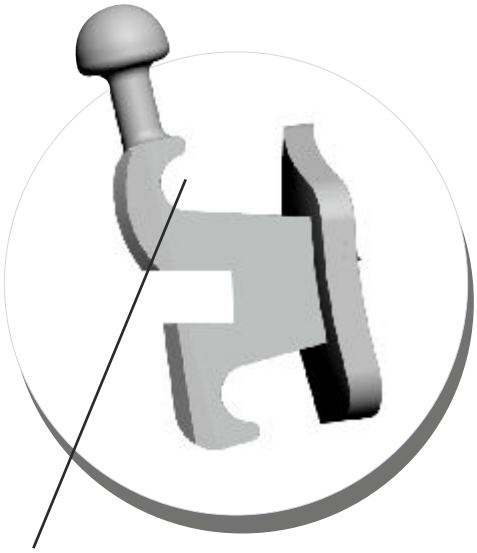
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METAL BRACKET SYSTEM



Permanent ID marks
with enhanced colors
for easy identification



Large tie wings design
for double tying



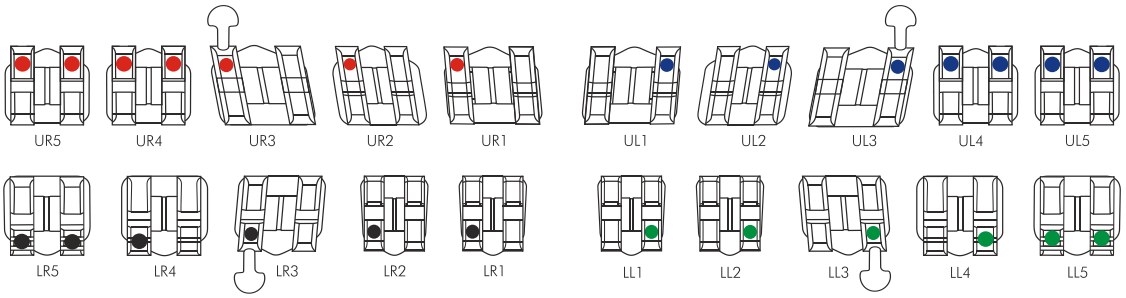
High gingival tie wings
on bicuspid for tissue avoidance,
easier ligation and better hygiene
Big help when bonding partially
erupted bicuspids



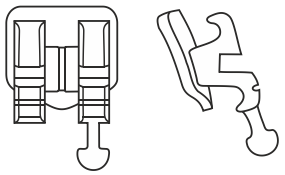
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TRUE TWIN MIM

METAL BRACKET SYSTEM

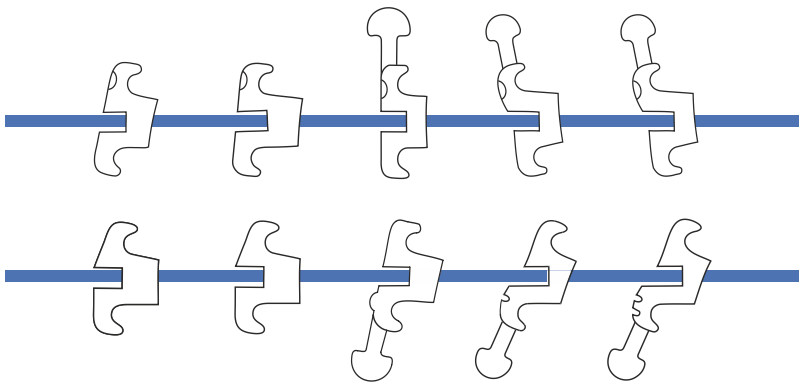


Gingivally offset bicuspid brackets



offer a large bonding base covering more area on the occlusal one third of buccal surface and increasing bond strength. Helps in fast eruption of partially erupted bicuspid

Torque in base design



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METAL BRACKET SYSTEM

Roth Prescription

Maxillary

Tooth		Torque	Angle	Width	R/L	ID	.018	.022
1|1	Central	+12°	+5°	.144"	R	●	BTS-R8-001	BTS-R2-001
					L	●	BTS-R8-002	BTS-R2-002
2|2	Lateral	+8°	+9°	.108"	R	●	BTS-R8-003	BTS-R2-003
					L	●	BTS-R8-004	BTS-R2-004
3|3	Cuspid with hook	0°	+11°	.136"	R	●	BTS-R8-005	BTS-R2-005
					L	●	BTS-R8-006	BTS-R2-006
3|3	Cuspid	0°	+11°	.136"	R	●	BTS-R8-007	BTS-R2-007
					L	●	BTS-R8-008	BTS-R2-008
4/5|4/5	Bicuspid	-7°	0°	.120"	R	●	BTS-R8-009R	BTS-R2-009R
					L	●	BTS-R8-009L	BTS-R2-009L
4/5|4/5	Bicuspid with hook	-7°	0°	.120"	R	●	BTS-R8-010	BTS-R2-010
					L	●	BTS-R8-011	BTS-R2-011
4/5|4/5	Bicuspid w/hook and offset	-7°	0°	.120"	R	●	BTS-R8-012	BTS-R2-012
					L	●	BTS-R8-013	BTS-R2-013
4/5|4/5	Bicuspid with offset	-7°	0°	.120"	R	●	BTS-R8-014R	BTS-R2-014R
					L	●	BTS-R8-014L	BTS-R2-014L

Roth Prescription

Mandibular

Tooth		Torque	Angle	Width	R/L	ID	.018	.022
1/2|1/2	Lower Anterior	0°	0°	.098"	R	●	BTS-R8-015R	BTS-R2-015R
					L	●	BTS-R8-015L	BTS-R2-015L
3|3	Cuspid With hook	-11°	+5°	.128"	R	●	BTS-R8-016	BTS-R2-016
					L	●	BTS-R8-017	BTS-R2-017
3|3	Cuspid	-11°	+5°	.128"	R	●	BTS-R8-018	BTS-R2-018
					L	●	BTS-R8-019	BTS-R2-019
4|4	1st Bicuspid	-17°	0°	.120"	R	●	BTS-R8-020R	BTS-R2-020R
					L	●	BTS-R8-020L	BTS-R2-020L
4|4	1st Bicuspid with hook	-17°	0°	.120"	R	●	BTS-R8-021	BTS-R2-021
					L	●	BTS-R8-022	BTS-R2-022
4|4	1st Bicuspid w/hook & offset	-17°	0°	.120"	R	●	BTS-R8-023	BTS-R2-023
					L	●	BTS-R8-024	BTS-R2-024
4|4	1st Bicuspid with offset	-17°	0°	.120"	R	●	BTS-R8-025R	BTS-R2-025R
					L	●	BTS-R8-025L	BTS-R2-025L
5|5	2nd Bicuspid	-22°	0°	.120"	R	●	BTS-R8-026R	BTS-R2-026R
					L	●	BTS-R8-026L	BTS-R2-026L
5|5	2nd Bicuspid with hook	-22°	0°	.120"	R	●	BTS-R8-027	BTS-R2-027
					L	●	BTS-R8-028	BTS-R2-028
5|5	2nd Bicuspid w/hook & offset	-22°	0°	.120"	R	●	BTS-R8-029	BTS-R2-029
					L	●	BTS-R8-030	BTS-R2-030
5|5	2nd Bicuspid with offset	-22°	0°	.120"	R	●	BTS-R8-031R	BTS-R2-031R
					L	●	BTS-R8-031L	BTS-R2-031L

Full Kits

Kits	.018	.022
Upper/Lower 5x5 No Hooks	BKS-R8-100	BKS-R2-100
Upper/Lower 5x5 No Hooks w/offset	BKS-R8-101	BKS-R2-101
Upper/Lower 5x5 Hook on 3	BKS-R8-102	BKS-R2-102
Upper/Lower 5x5 Hooks on 3 w/offset	BKS-R8-103	BKS-R2-103
Upper/Lower 5x5 Hooks on 3,4,5	BKS-R8-104	BKS-R2-104
Upper/Lower 5x5 Hooks on 3,4 & 5 w/offset	BKS-R8-105	BKS-R2-105



SAPPHIRE™
TRUE TWIN MIM
METAL BRACKET SYSTEM

MBT Prescription

Maxillary

Tooth		Torque	Angle	Width	R/L	ID	.018	.022
1|1	Central	+17°	+4°	.144"	R	red	BTS-M8-101	BTS-M2-101
					L	blue	BTS-M8-102	BTS-M2-102
2|2	Lateral	+10°	+8°	.108"	R	red	BTS-M8-103	BTS-M2-103
					L	blue	BTS-M8-104	BTS-M2-104
3|3	Cuspid with hook	0°	+9°	.136"	R	red	BTS-M8-105	BTS-M2-105
					L	blue	BTS-M8-106	BTS-M2-106
3|3	Cuspid	0°	+9°	.136"	R	red	BTS-M8-107	BTS-M2-107
					L	blue	BTS-M8-108	BTS-M2-108
3|3	Cuspid with hook	-7°	+9°	.136"	R	red	BTS-M8-109	BTS-M2-109
					L	blue	BTS-M8-110	BTS-M2-110
3|3	Cuspid	-7°	+9°	.136"	R	red	BTS-M8-111	BTS-M2-111
					L	blue	BTS-M8-112	BTS-M2-112
4/5|4/5	Bicuspid with hook	-7°	0°	.120"	R	red	BTS-M8-113	BTS-M2-113
					L	blue	BTS-M8-114	BTS-M2-114
4/5|4/5	Bicuspid	-7°	0°	.120"	R	red	BTS-M8-115R	BTS-M2-115R
					L	blue	BTS-M8-115L	BTS-M2-115L
4/5|4/5	Bicuspid with offset	-7°	0°	.120"	R	red	BTS-M8-116R	BTS-M2-116R
					L	blue	BTS-M8-116L	BTS-M2-116L
4/5|4/5	Bicuspid w/hook and offset	-7°	0°	.120"	R	red	BTS-M8-117	BTS-M2-117
					L	blue	BTS-M8-118	BTS-M2-118

MBT Prescription

Mandibular

Tooth		Torque	Angle	Width	R/L	ID	.018	.022
1/2|1/2	Lower Anterior	-6°	0°	.098"	R	black	BTS-M8-119R	BTS-M2-119R
					L	green	BTS-M8-119L	BTS-M2-119L
3|3	Cuspid with hook	-6°	+3°	.128"	R	black	BTS-M8-120	BTS-M2-120
					L	green	BTS-M8-121	BTS-M2-121
3|3	Cuspid with hook	0°	+3°	.128"	R	black	BTS-M8-122	BTS-M2-122
					L	green	BTS-M8-123	BTS-M2-123
3|3	Cuspid	-6°	+3°	.128"	R	black	BTS-M8-124	BTS-M2-124
					L	green	BTS-M8-125	BTS-M2-125
3|3	Cuspid	0°	+3°	.128"	R	black	BTS-M8-126	BTS-M2-126
					L	green	BTS-M8-127	BTS-M2-127
4|4	1st Bicuspid with hook	-12°	+2°	.120"	R	black	BTS-M8-128	BTS-M2-128
					L	green	BTS-M8-129	BTS-M2-129
4|4	1st Bicuspid	-12°	+2°	.120"	R	black	BTS-M8-130	BTS-M2-130
					L	green	BTS-M8-131	BTS-M2-131
4|4	1st Bicuspid with offset	-12°	+2°	.120"	R	black	BTS-M8-132	BTS-M2-132
					L	green	BTS-M8-133	BTS-M2-133
4|4	1st Bicuspid w/hook & offset	-12°	+2°	.120"	R	black	BTS-M8-134	BTS-M2-134
					L	green	BTS-M8-135	BTS-M2-135
5|5	2nd Bicuspid with hook	-17°	+2°	.120"	R	black	BTS-M8-136	BTS-M2-136
					L	green	BTS-M8-137	BTS-M2-137
5|5	2nd Bicuspid	-17°	+2°	.120"	R	black	BTS-M8-138	BTS-M2-138
					L	green	BTS-M8-139	BTS-M2-139
5|5	2nd Bicuspid with offset	-17°	+2°	.120"	R	black	BTS-M8-140	BTS-M2-140
					L	green	BTS-M8-141	BTS-M2-141
5|5	2nd Bicuspid w/hook & offset	-17°	+2°	.120"	R	black	BTS-M8-142	BTS-M2-142
					L	green	BTS-M8-143	BTS-M2-143

Full Kits

Kits	.018	.022
Upper/Lower 5x5 No Hooks*	BKS-M8-100*	BKS-M2-100*
Upper/Lower 5x5 No Hooks w/offset*	BKS-M8-101*	BKS-M2-101*
Upper/Lower 5x5 Hook on 3*	BKS-M8-102*	BKS-M2-102*
Upper/Lower 5x5 Hooks on 3 w/offset*	BKS-M8-103*	BKS-M2-103*
Upper/Lower 5x5 Hooks on 3,4,5*	BKS-M8-104*	BKS-M2-104*
Upper/Lower 5x5 Hooks on 3,4 & 5 w/offset*	BKS-M8-105*	BKS-M2-105*
Upper/Lower 5x5 No Hooks	BKS-M8-200	BKS-M2-200
Upper/Lower 5x5 No Hooks w/offset	BKS-M8-201	BKS-M2-201
Upper/Lower 5x5 Hook on 3	BKS-M8-202	BKS-M2-202
Upper/Lower 5x5 Hooks on 3 w/offset	BKS-M8-203	BKS-M2-203
Upper/Lower 5x5 Hooks on 3,4,5	BKS-M8-204	BKS-M2-204
Upper/Lower 5x5 Hooks on 3,4 & 5 w/offset	BKS-M8-205	BKS-M2-205

* Cuspid brackets in these Kits are having -7 deg torque in uppers and -6 deg torque in lowers.
Other kits have O deg torque in all cuspids.
For any other cuspid torque combination, please place order for individual brackets.

Modern Orthodontics



SAPPHIRE™
TRUE TWIN MIM
METAL BRACKET SYSTEM

Maxillary

Bio- Progressive Ricketts/Hilgers Prescription

Tooth		Torque	Angle	Width	R/L	ID	.018	.022
1|1	Central	+22°	+5°	.144"	R	●	BTS-B8-301	BTS-B2-301
					L	●	BTS-B8-302	BTS-B2-302
2|2	Lateral	+14°	+9°	.108"	R	●	BTS-B8-303	BTS-B2-303
					L	●	BTS-B8-304	BTS-B2-304
3|3	Cuspid	+7°	+9°	.136"	R	●	BTS-B8-305	BTS-B2-305
					L	●	BTS-B8-306	BTS-B2-306
3|3	Cuspid with hook	+7°	+9°	.136"	R	●	BTS-B8-307	BTS-B2-307
					L	●	BTS-B8-308	BTS-B2-308
4/5|4/5	Bicuspid	-7°	0°	.120"	R	●	BTS-B8-309R	BTS-B2-309R
					L	●	BTS-B8-309L	BTS-B2-309L
4/5|4/5	Bicuspid with hook	-7°	0°	.120"	R	●	BTS-B8-310	BTS-B2-310
					L	●	BTS-B8-311	BTS-B2-311
4/5|4/5	Bicuspid w/hook & offset	-7°	0°	.120"	R	●	BTS-B8-312	BTS-B2-312
					L	●	BTS-B8-313	BTS-B2-313
4/5|4/5	Bicuspid with offset	-7°	0°	.120"	R	●	BTS-B8-314R	BTS-B2-314R
					L	●	BTS-B8-314L	BTS-B2-314L
4/5|4/5	Bicuspid	0°	0°	.120"	R	●	BTS-B8-315R	BTS-B2-315R
					L	●	BTS-B8-315L	BTS-B2-315L
4/5|4/5	Bicuspid with hook	0°	0°	.120"	R	●	BTS-B8-316	BTS-B2-316
					L	●	BTS-B8-317	BTS-B2-317

Mandibular

Bio- Progressive Ricketts/Hilgers Prescription

Tooth		Torque	Angle	Width	R/L	ID	.018	.022
1/2|1/2	Lower Anterior	0°	0°	.098"	R	●	BTS-B8-318R	BTS-B2-318R
					L	●	BTS-B8-318L	BTS-B2-318L
3 | 3	Cuspid With hook	+7°	+5°	.128"	R	●	BTS-B8-319	BTS-B2-319
					L	●	BTS-B8-320	BTS-B2-320
3 | 3	Cuspid	+7°	+5°	.128"	R	●	BTS-B8-321	BTS-B2-321
					L	●	BTS-B8-322	BTS-B2-322
4 | 4	1st Bicuspid	-12°	0°	.120"	R	●	BTS-B8-323R	BTS-B2-323R
					L	●	BTS-B8-323L	BTS-B2-323L
4 | 4	1st Bicuspid with hook	-12°	0°	.120"	R	●	BTS-B8-324	BTS-B2-324
					L	●	BTS-B8-325	BTS-B2-325
4 | 4	1st Bicuspid with offset	-12°	0°	.120"	R	●	BTS-B8-326R	BTS-B2-326R
					L	●	BTS-B8-326L	BTS-B2-326L
4 | 4	1st Bicuspid w/hook & offset	-12°	0°	.120"	R	●	BTS-B8-327	BTS-B2-327
					L	●	BTS-B8-328	BTS-B2-328
5 | 5	2nd Bicuspid	-17°	0°	.120"	R	●	BTS-B8-329R	BTS-B2-329R
					L	●	BTS-B8-329L	BTS-B2-329L
5 | 5	2nd Bicuspid with offset	-17°	0°	.120"	R	●	BTS-B8-330R	BTS-B2-330R
					L	●	BTS-B8-330L	BTS-B2-330L
5 | 5	2nd Bicuspid with hook	-17°	0°	.120"	R	●	BTS-B8-331	BTS-B2-331
					L	●	BTS-B8-332	BTS-B2-332
5 | 5	2nd Bicuspid w/hook & offset	-17°	0°	.120"	R	●	BTS-B8-333	BTS-B2-333
					L	●	BTS-B8-334	BTS-B2-334
4/5|4/5	Bicuspid	0°	0°	.120"	R	●	BTS-B8-335R	BTS-B2-335R
					L	●	BTS-B8-335L	BTS-B2-335L
4/5|4/5	Bicuspid with hook	0°	0°	.120"	R	●	BTS-B8-336	BTS-B2-336
					L	●	BTS-B8-337	BTS-B2-337



SAPPHIRE™
TRUE TWIN MIM
METAL BRACKET SYSTEM

Full Kits ▲▼

Ricketts Configuration

0 Torque and 0 Angulation on both upper and lower bicuspids

Kits	.018	.022
Upper/Lower 5x5 No Hooks	BKS-B8-301	BKS-B2-301
Upper/Lower 5x5 Hook on 3	BKS-B8-302	BKS-B2-302

Hilgers Configuration

Kits	.018	.022
Upper/Lower 5x5 No Hooks	BKS-B8-303	BKS-B2-303
Upper/Lower 5x5 Hook on 3	BKS-B8-304	BKS-B2-304
Upper/Lower 5x5 Hooks on 3,4,5	BKS-B8-305	BKS-B2-305

Hilgers Offsets Configuration

Kits	.018	.022
Upper/Lower 5x5 No Hooks	BKS-B8-306	BKS-B2-306
Upper/Lower 5x5 Hook on 3	BKS-B8-307	BKS-B2-307
Upper/Lower 5x5 Hooks on 3,4,5	BKS-B8-308	BKS-B2-308

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