

# REDUCED BEAM SECTION (DOG BONE) VS. SIDEPLATE®

4-story office building in high seismic

	SidePlate®		Reduced Beam Section	
	WEIGHTS (PSF)	WEIGHTS (TONS)	WEIGHTS (PSF)	WEIGHTS (TONS)
Lateral Columns	W14X		W14X	
	1.75	106	2.62	159
Lateral Beams	W18X, W21X		W24X	
	182	82	1.76	106
Gravity Columns & Beams*	6.43	389	6.43	389
SidePlate Connection Wt.	0.65	39	0.00	0
RBS Connection Wt.	0.00	0	0.05	3
Angle Braces for Frame Beams	0.15	9	0.18	11
Misc Steel (Same for Both)	1.60	97	1.60	97
<b>Total Steel Weight<sup>(1)</sup></b>	<b>11.94</b>	<b>722</b>	<b>12.63</b>	<b>764</b>
Fab - Erect Price	\$2,845 Unit Rate		\$2,800 Unit Rate	
SidePlate License Fee	\$48,000.00		N/A	
<b>Estimated Fabricated &amp; Erected Steel Costs</b>	<b>\$2,102,368</b>		<b>\$2,139,709</b>	
<b>\$ SF</b>	<b>\$17.37</b>		<b>17.68</b>	
<b>Owner's Testing Costs:</b>	0 Joints @ 2hrs/joint		77 Joints @ 2hrs/joint	
<u>Shop</u> Non-Destructive Testing	\$90/hr for UT Inspection		\$90/hr for UT Inspection	
	\$0		\$13,860	
<b>Owner's Testing Costs:</b>	154 Conn @ 1.5hrs/BM End		154 Conn @ 2hrs/BM End	
<u>Field</u> Non-Destructive Testing	\$90/hr for UT Inspection		\$90/hr for UT Inspection	
	\$20,790		\$27,720	

Use SidePlate connection technology and saves an estimated **\$58,132 or \$0.48/SF VS. RBS**

Estimated Steel Reduction	Estimated Savings For Steel Fabrication & Erection	Estimated Savings for N.D.T. Inspections	Estimated Savings On Construction Schedule**
<b>0.70</b> psf	<b>\$37,342</b>	<b>\$20,790</b>	<b>4-5 Days</b>
<b>42</b> tons			