

# TRADITIONAL BRACED FRAME VS. SIDEPLATE® (R=3)

5-story hospital in low seismic

Results	
Floor Areas Used for Analysis	303,408 sf

Braced Frame - Base Building						
Foundations	\$1,966,440	\$1,674,236	\$1,674,236	\$1,674,236	\$1,674,236	\$1,674,236
Piles	\$1,692,600	\$1,249,000	\$1,249,000	\$1,249,000	\$1,249,000	\$1,249,000
Pile Caps	\$273,840	\$425,236	\$425,236	\$425,236	\$425,236	\$425,236
Structural Steel	\$7,102,250	\$7,545,000	\$6,949,057	\$5,816,311	\$5,186,075	\$6,400,000
Total	\$9,068,690	\$9,219,236	\$8,623,293	\$7,490,567	\$6,860,311	\$8,074,236
<b>Cost/sf</b>	<b>\$30</b>	<b>\$30</b>	<b>\$28</b>	<b>\$25</b>	<b>\$23</b>	<b>\$27</b>

SidePlate Moment Frame - Base Building						
Foundations	\$1,878,480	\$1,602,848	\$1,602,848	\$1,602,848	\$1,602,848	\$1,602,848
Piles	\$1,621,200	\$1,198,000	\$1,198,000	\$1,198,000	\$1,198,000	\$1,198,000
Pile Caps	\$257,280	\$404,848	\$404,848	\$404,848	\$404,848	\$404,848
Structural Steel	\$7,200,150	\$7,614,000	\$7,067,486	\$7,560,927	\$5,132,512	\$6,242,000
Total	\$9,078,630	\$9,216,848	\$8,670,334	\$9,163,775	\$6,735,360	\$7,844,848
<b>Cost/sf</b>	<b>\$30</b>	<b>\$30</b>	<b>\$29</b>	<b>\$30*</b>	<b>\$22</b>	<b>\$26</b>

\*This fabricator later acknowledged that he never actually took the time to bid the Sideplate options and simply "threw a big number at it." Needless to say, this fabricator wasn't awarded the job.