Appendix D: Structural element geometry estimations from T3PO vs verification target structural element geometries

This appendix provides the SEG estimates generated from T3PO against their verification values along with percentage errors for building type 1-5.

Table D.1: Estimated and target SEG for building type 1

	Beam wid	th /mm		Beam dept	th /mm		Column width /mm		
Duilding	Estimate	Targe	Error/	Estimate	Targe	Error/	Estimate	Targe	Error/
Building	d	t	%	d	t	%	d	t	%
Type1-1	700	700	0	600	600	0	1000	1000	0
Type1-2	600	600	0	600	700	-14	1000	1000	0
Type1-3	700	700	0	600	600	0	1000	1000	0
Type1-4	600	600	0	700	700	0	1000	1000	0
Type1-5	800	800	0	600	600	0	1000	1000	0
Type1-6	600	600	0	700	700	0	1000	1000	0
Type1-7	800	800	0	700	600	17	1000	1000	0
Type1-8	600	600	0	700	700	0	1000	1000	0
Type1-9	600	600	0	700	700	0	1000	1000	0
Type1-10	600	500	20	700	800	-13	1000	1000	0
Type1-11	600	600	0	700	700	0	1000	1000	0
Type1-12	700	700	0	600	600	0	1000	1000	0
Type1-13	700	700	0	700	600	17	900	900	0
Type1-14	700	700	0	700	600	17	1000	1000	0
Type1-15	600	600	0	700	700	0	1000	1000	0
Type1-16	600	500	20	700	800	-13	1000	1000	0
Type1-17	600	500	20	700	800	-13	1000	1000	0
Type1-18	700	700	0	800	600	33	900	900	0
Type1-19	700	700	0	800	700	14	900	900	0
Type1-20	700	700	0	800	800	0	900	900	0
Type1-21	700	700	0	800	600	33	900	900	0
Type1-22	700	700	0	800	600	33	900	900	0
Type1-23	700	700	0	800	800	0	900	900	0
Type1-24	700	700	0	800	600	33	900	900	0
Type1-25	800	800	0	800	700	14	1100	1100	0
Type1-26	800	800	0	800	700	14	1100	1100	0
Type1-27	900	900	0	800	700	14	1100	1100	0
Type1-28	800	700	14	800	700	14	1100	1100	0
Type1-29	800	800	0	800	700	14	1100	1100	0
Type1-30	800	800	0	800	700	14	1100	1100	0
Type1-31	800	800	0	800	700	14	1100	1100	0
Type1-32	900	900	0	800	800	0	1100	1100	0

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Type1-33	800	800	0	800	700	14	1100	1100	0
Type1-34	800	800	0	800	700	14	1100	1100	0
Type1-35	900	900	0	800	800	0	1100	1100	0
Type1-36	600	700	-14	700	700	0	1100	1100	0
Type1-37	600	600	0	700	800	-13	1100	1100	0
Type1-38	600	600	0	700	800	-13	1100	1100	0
Type1-39	600	600	0	700	700	0	1100	1100	0
Type1-40	600	600	0	700	800	-13	1100	1100	0
Type1-41	600	600	0	700	800	-13	1100	1100	0
Type1-42	600	600	0	700	800	-13	1100	1100	0
Type1-43	600	700	-14	700	700	0	1100	1100	0
Type1-44	800	800	0	704	800	-12	1000	1000	0
Type1-45	800	800	0	804	800	1	1000	1000	0
Type1-46	800	800	0	800	600	33	1000	1000	0
Type1-47	800	800	0	904	900	0	1300	1300	0
Type1-48	800	800	0	900	900	0	1300	1300	0
Type1-49	900	900	0	900	900	0	1300	1300	0
Type1-50	900	900	0	900	900	0	1300	1300	0
Type1-51	900	900	0	900	900	0	1300	1300	0
Type1-52	700	700	0	800	800	0	1000	1000	0
Type1-53	700	700	0	800	800	0	1000	1000	0
Type1-54	700	700	0	800	800	0	1000	1000	0
Type1-55	700	700	0	800	800	0	1000	1000	0
Type1-56	700	700	0	800	800	0	1000	1000	0
Type1-57	700	700	0	800	800	0	1000	1000	0
Type1-58	700	700	0	800	800	0	1000	1000	0
Type1-59	1000	1000	0	800	800	0	1200	1200	0
Type1-60	400	400	0	1000	1000	0	1400	1400	0
Type1-61	400	400	0	1000	1100	-9	1400	1400	0
Type1-62	400	400	0	1000	1100	-9	1400	1400	0
Type1-63	400	400	0	1000	1100	-9	1400	1400	0
Type1-64	400	400	0	1000	1000	0	1400	1400	0
Type1-65	400	400	0	1000	1100	-9	1400	1400	0
Type1-66	400	400	0	1000	1100	-9	1400	1400	0
Type1-67	400	400	0	1000	1100	-9	1400	1400	0

Table D.2: Estimated and target SEG for building type 2

	Beam wid	th /mm		Beam dep	th /mm		Column width /mm		
Duilding	Estimate	Targe	Error/	Estimate	Targe	Error/	Estimate	Targe	Error/
Building	d	t	%	d	t	%	d	t	%
Type2-1	700	700	0	800	800	0	950	900	6
Type2-2	700	700	0	800	800	0	950	900	6
Type2-3	700	700	0	800	800	0	950	900	6
Type2-4	700	700	0	800	800	0	950	900	6
Type2-5	700	700	0	800	800	0	1000	1000	0

Type2-6	700	700	0	800	800	0	950	900	6
Type2-7	700	700	0	800	800	0	950	900	6
Type2-8	700	700	0	800	800	0	950	900	6
Type2-9	700	700	0	800	800	0	1000	1000	0
Type2-10	700	700	0	800	800	0	1000	1000	0
Type2-11	700	700	0	800	800	0	950	900	6
Type2-12	700	700	0	800	800	0	950	900	6
Type2-13	700	700	0	800	800	0	1000	1000	0
Type2-14	700	700	0	800	800	0	950	900	6
Type2-15	700	700	0	800	800	0	950	900	6
Type2-16	700	700	0	800	800	0	1000	1000	0
Type2-17	700	700	0	800	800	0	1000	1000	0
Type2-18	700	700	0	800	800	0	950	900	6
Type2-19	700	700	0	800	800	0	950	900	6
Type2-20	700	700	0	800	800	0	1000	1000	0
Type2-21	700	700	0	800	800	0	950	900	6
Type2-22	500	500	0	600	600	0	750	700	7
Type2-23	500	500	0	600	600	0	750	700	7
Type2-24	500	500	0	600	600	0	800	800	0
Type2-25	500	500	0	600	600	0	750	700	7
Type2-26	500	500	0	600	600	0	750	700	7
Type2-27	500	500	0	600	600	0	750	700	7
Type2-28	500	500	0	600	600	0	750	700	7
Type2-29	500	500	0	600	600	0	750	700	7
Type2-30	500	500	0	600	600	0	750	700	7
Type2-31	500	500	0	600	600	0	800	800	0
Type2-32	500	500	0	600	600	0	800	800	0
Type2-33	500	500	0	600	600	0	750	700	7
Type2-34	500	500	0	600	600	0	750	700	7
Type2-35	500	500	0	600	600	0	750	700	7
Type2-36	500	500	0	600	600	0	750	700	7
Type2-37	500	500	0	600	600	0	800	800	0
Type2-38	500	500	0	600	600	0	750	700	7
Type2-39	500	500	0	600	600	0	750	700	7
Type2-40	500	500	0	600	600	0	750	700	7
Type2-41	500	500	0	600	600	0	800	800	0
Type2-42	500	500	0	600	600	0	800	800	0
Type2-43	500	500	0	600	600	0	750	700	7
Type2-44	500	500	0	600	600	0	800	800	0
Type2-45	500	500	0	600	600	0	750	700	7
Type2-46	500	500	0	600	600	0	800	800	0
Type2-47	400	400	0	600	600	0	900	800	13
Type2-48	500	500	0	500	500	0	900	700	29
Type2-49	500	500	0	700	700	0	900	900	0
Type2-50	400	400	0	600	600	0	850	700	21

Type2-51	500	500	0	500	500	0	850	700	21
Type2-52	500	500	0	600	600	0	900	900	0
Type2-53	500	500	0	700	700	0	900	900	0
Type2-54	500	500	0	700	700	0	900	900	0
Type2-55	500	500	0	700	700	0	900	900	0
Type2-56	500	500	0	700	700	0	900	900	0
Type2-57	500	500	0	700	700	0	900	900	0
Type2-58	500	500	0	600	600	0	900	900	0
Type2-59	500	500	0	700	700	0	900	900	0
Type2-60	400	400	0	600	600	0	850	800	6
Type2-61	500	500	0	600	600	0	900	900	0
Type2-62	700	700	0	800	800	0	950	1000	-5
Type2-63	700	700	0	800	800	0	1200	1100	9
Type2-64	700	700	0	800	800	0	1000	900	11
Type2-65	700	700	0	800	800	0	1200	1200	0
Type2-66	700	700	0	800	800	0	950	1000	-5
Type2-67	700	700	0	800	800	0	1200	1100	9
Type2-68	700	700	0	800	800	0	1200	1200	0
Type2-69	700	700	0	800	800	0	1200	1100	9
Type2-70	700	700	0	800	800	0	1200	1200	0
Type2-71	700	700	0	800	800	0	950	900	6
Type2-72	700	700	0	800	800	0	950	1000	-5
Type2-73	700	700	0	800	800	0	1200	1200	0
Type2-74	700	700	0	800	800	0	1200	1200	0
Type2-75	700	700	0	800	800	0	1200	1000	20
Type2-76	700	700	0	800	800	0	1000	1100	-9
Type2-77	700	700	0	800	800	0	1200	1100	9
Type2-78	700	700	0	800	800	0	950	1000	-5
Type2-79	700	700	0	800	800	0	950	1000	-5
Type2-80	700	700	0	800	800	0	1200	1200	0
Type2-81	700	700	0	800	800	0	1200	1200	0
Type2-82	700	700	0	800	800	0	950	900	6
Type2-83	700	700	0	800	800	0	1200	1100	9
Type2-84	700	700	0	800	800	0	1200	1200	0
Type2-85	700	700	0	800	800	0	950	1000	-5
Type2-86	700	700	0	800	800	0	950	1000	-5
Type2-87	700	700	0	800	800	0	950	1000	-5
Type2-88	700	700	0	800	800	0	1200	1200	0
Type2-89	700	700	0	800	800	0	950	1000	-5
Type2-90	700	700	0	800	800	0	1200	1200	0
Type2-91	600	600	0	700	700	0	950	900	6
Type2-92	600	600	0	700	700	0	1100	1100	0
Type2-93	600	600	0	700	700	0	1100	1000	10
Type2-94	900	900	0	800	800	0	1100	1100	0
, - <i>)</i>									0

Type2-96	600	600	0	700	700	0	1100	1000	10
Type2-97	600	600	0	700	700	0	1100	1000	10
Type2-98	800	800	0	700	700	0	1100	1100	0
Type2-99	900	900	0	800	800	0	1100	1100	0
Type2-100	800	800	0	700	700	0	1100	1100	0
Type2-101	900	900	0	800	800	0	1100	1100	0
Type2-102	600	600	0	700	700	0	1100	1000	10
Type2-103	900	900	0	700	700	0	1100	1100	0
Type2-104	600	600	0	700	700	0	1000	900	11
Type2-105	600	600	0	700	700	0	1100	1100	0
Type2-106	600	600	0	700	700	0	1100	1000	10
Type2-107	600	600	0	700	700	0	1100	1100	0
Type2-108	800	800	0	900	900	0	1200	1200	0
Type2-109	800	800	0	900	900	0	1200	1100	9
Type2-110	800	800	0	900	900	0	1200	1200	0
Type2-111	800	800	0	900	900	0	1200	1100	9
Type2-112	800	800	0	900	900	0	1200	1200	0
Type2-113	800	800	0	900	900	0	1200	1200	0
Type2-114	800	800	0	900	900	0	1200	1200	0
Type2-115	800	800	0	900	900	0	1200	1200	0
Type2-116	800	800	0	900	900	0	1200	1300	-8
Type2-117	800	800	0	900	900	0	1200	1200	0
Type2-118	800	800	0	900	900	0	1200	1200	0
Type2-119	800	800	0	900	900	0	1200	1200	0
Type2-120	800	800	0	900	900	0	1200	1300	-8
Type2-121	700	700	0	800	800	0	900	900	0
Type2-122	700	700	0	800	800	0	900	900	0
Type2-123	700	700	0	800	800	0	900	900	0
Type2-124	700	700	0	800	800	0	900	900	0
Type2-125	700	700	0	800	800	0	900	900	0
Type2-126	700	700	0	800	800	0	950	1000	-5
Type2-127	700	700	0	800	800	0	950	1000	-5
Type2-128	700	700	0	800	800	0	900	900	0
Type2-129	700	700	0	800	800	0	900	900	0
Type2-130	700	700	0	800	800	0	900	900	0
Type2-131	700	700	0	800	800	0	900	900	0
Type2-132	700	700	0	800	800	0	900	900	0
Type2-133	700	700	0	800	800	0	900	900	0
Type2-134	700	700	0	800	800	0	900	900	0
Type2-135	700	700	0	800	800	0	950	1000	-5
Type2-136	700	700	0	800	800	0	950	1000	-5
Type2-137	700	700	0	800	800	0	900	900	0
Type2-138	700	700	0	800	800	0	900	900	0
Type2-139	700	700	0	800	800	0	900	900	0
Type2-140	700	700	0	800	800	0	950	1000	-5

Type2-141	700	700	0	800	800	0	900	900	0
Type2-141 Type2-142	700	700	0	800	800	0	950	1000	-5
Type2-142 Type2-143	700	700	0	800	800	0	900	900	0
Type2-143 Type2-144	700	700	0	800	800	0	900	900	0
Type2-144 Type2-145	700	700	0	800	800	0	900	900	0
Type2-145 Type2-146	700	700	0	800	800	0	900	900	0
Type2-140 Type2-147	700	700	0	800	800	0	900	900	0
	700	700	0	800	800	0	900	900	0
Type2-148	700	700	0	800	800	0	950	-	-5
Type2-149	700	700	0	800	800	0	1000	1000	0
Type2-150	700	700	0	800	800	0	1100	1200	-8
Type2-151	700	700	0	800		0		1200	-8 -8
Type2-152	700	700	0	800	800	0	1100	-	-8
Type2-153			0			0	1100	1200	0
Type2-154	700	700	0	800	800	0	1000	1000	-8
Type2-155	700		0		800	0	1100	1200	0
Type2-156	700	700	0	800	800	0	1000	1000	-8
Type2-157	700	700	0	800	800	0	1100	1200	-8 -8
Type2-158	700	700	0	800	800	0	1100	1200	-8 -8
Type2-159	700	700			800	0	1100	1200	-8 -8
Type2-160	700	700	0	800	800	0	1100	1200	-8 -8
Type2-161	700	700		800	800		1100	1200	
Type2-162	700	700	0	800	800	0	1100	1200	-8 0
Type2-163	700	700	0	800	800	0	1000	1000	-8
Type2-164	700	700	0	800	800	0	1100	1200	-8 -8
Type2-165	700	700		800	800	.	1100	1200	
Type2-166	700	700	0	800	800	0	1100	1200	-8 0
Type2-167	700	700	0	800	800	0	1000	1000	0
Type2-168	700	700		800	800	0	1000	1000	-8
Type2-169	700 300	700 300	0	800	800	0	1100	1200	0
Type2-170				1000	1000		1500	1500	0
Type2-171	300	300	0	1200	1200	0	1500	1500	
Type2-172	900	900	0	800	800	0	1500	1500	0
Type2-173	800	800		800	800	-	1500	1500	
Type2-174	900	900	0	800	800	0	1500	1500	0
Type2-175	300	300	0	1100	1100	0	1500	1500	0
Type2-176	300	300	0	1200	1200	0	1500	1500	0
Type2-177	900	900	0	800	800	0	1500	1500	0
Type2-178	900	900		800	800	0	1500	1500	0
Type2-179	900	1000	-10	800	800	0	1500	1500	0
Type2-180	300	300	0	1100	1100	.	1500	1500	ļ
Type2-181	900	900	0	800	800	0	1500	1500	0
Type2-182	800	800	0	900	900		1500	1500	0
Type2-183	300	300	0	1100	1100	0	1500	1500	0
Type2-184	300	300	0	1200	1200	0	1500	1500	0
Type2-185	900	900	0	800	800	0	1500	1500	0

Type2-186	900	900	0	800	800	0	1500	1500	0
Type2-187	900	900	0	800	800	0	1500	1500	0
Type2-188	900	900	0	800	800	0	1500	1500	0
Type2-189	900	1000	-10	800	800	0	1500	1500	0

Table D.3: Estimated and target SEG for building type 3

	Beam	width /	mm	Bean	n depth /	mm	Column width /mm		
Building	Estimate	Targe	Error/	Estimate	Targe	Error/	Estimate	Targe	Error/
	d	t	%	d	t	%	d	t	%
Type3-1	500	500	0	700	600	17	1000	900	11
Type3-2	500	500	0	700	600	17	1000	900	11
Type3-3	500	500	0	700	700	0	1200	1200	0
Type3-4	500	500	0	800	800	0	1100	1100	0
Type3-5	600	600	0	700	700	0	1000	1000	0
Type3-6	500	500	0	700	600	17	1000	900	11
Type3-7	600	600	0	700	700	0	1000	1000	0
Type3-8	500	500	0	800	800	0	1100	1100	0
Type3-9	600	600	0	700	700	0	1000	1000	0
Type3-10	600	600	0	700	700	0	1000	1000	0
Type3-11	600	600	0	700	700	0	1000	1000	0
Type3-12	500	500	0	800	800	0	1100	1100	0
Type3-13	500	500	0	700	600	17	1000	900	11
Type3-14	600	600	0	700	700	0	1000	1000	0
Type3-15	500	500	0	700	700	0	1100	1100	0
Type3-16	500	500	0	700	700	0	1100	1100	0
Type3-17	500	500	0	700	700	0	1100	1100	0
Type3-18	600	600	0	700	700	0	1000	1000	0
Type3-19	600	600	0	700	700	0	1000	1000	0
Type3-20	600	600	0	700	700	0	1000	1000	0
Type3-21	500	500	0	700	700	0	1100	1100	0
Type3-22	500	500	0	700	700	0	1100	1100	0
Type3-23	500	500	0	700	600	17	1000	900	11
Type3-24	500	500	0	700	700	0	1000	1000	0
Type3-25	500	500	0	700	700	0	1100	1100	0
Type3-26	600	600	0	600	600	0	1000	1000	0
Type3-27	600	600	0	600	600	0	1000	800	25
Type3-28	500	500	0	700	700	0	1000	1000	0
Type3-29	500	500	0	700	600	17	1000	900	11
Type3-30	500	500	0	700	700	0	1100	1100	0
Type3-31	500	500	0	700	700	0	1100	1100	0
Type3-32	600	600	0	700	700	0	1000	1000	0
Type3-33	500	500	0	700	700	0	1100	1100	0
Type3-34	600	600	0	700	700	0	1000	1000	0
Type3-35	500	500	0	700	600	17	1000	900	11
Type3-36	500	500	0	700	700	0	1100	1100	0

Type3-37	600	600	0	700	600	17	1200	1000	20
Type3-38	600	600	0	800	800	0	1200	1200	0
Type3-39	600	600	0	800	800	0	1200	1200	0
Type3-40	600	600	0	800	800	0	1200	1200	0
Type3-41	600	600	0	700	700	0	1200	1200	0
Type3-42	600	600	0	800	800	0	1200	1200	0
Type3-43	600	600	0	800	800	0	1200	1200	0
Type3-44	600	600	0	800	800	0	1200	1200	0
Type3-45	600	500	20	700	700	0	1200	1100	9
Type3-46	600	600	0	800	800	0	1200	1200	0
Type3-47	600	500	20	800	700	14	1200	1100	9
Type3-48	600	600	0	800	800	0	1200	1200	0
Type3-49	400	400	0	600	600	0	1000	1000	0
Type3-50	400	400	0	600	600	0	900	800	13
Type3-51	500	500	0	600	600	0	900	900	0
Type3-52	500	500	0	600	600	0	900	900	0
Type3-53	500	500	0	600	600	0	900	900	0
Type3-54	500	500	0	600	500	20	900	700	29
Type3-55	500	500	0	600	600	0	900	900	0
Type3-56	500	500	0	700	700	0	1100	1000	10
Type3-57	500	500	0	700	700	0	1200	1200	0
Type3-58	700	700	0	600	600	0	1100	1100	0
Type3-59	500	500	0	700	700	0	1200	1200	0
Type3-60	600	600	0	700	700	0	1100	1100	0
Type3-61	600	600	0	700	700	0	1100	1100	0
Type3-62	600	600	0	700	700	0	1100	1100	0
Type3-63	600	600	0	700	700	0	1100	1100	0
Type3-64	500	500	0	700	600	17	1100	1000	10
Type3-65	600	600	0	800	700	14	1200	1200	0
Type3-66	600	600	0	800	800	0	1200	1200	0
Type3-67	600	600	0	800	800	0	1200	1200	0
Type3-68	600	600	0	800	800	0	1200	1200	0
Type3-69	600	600	0	800	800	0	1200	1200	0
Type3-70	600	600	0	800	800	0	1200	1200	0
Type3-71	600	600	0	800	700	14	1400	1200	17
Type3-72	500	500	0	900	900	0	1500	1500	0
Type3-73	500	500	0	800	800	0	1400	1200	17
Type3-74	600	600	0	800	700	14	1400	1200	17
Type3-75	500	500	0	800	800	0	1500	1500	0
Type3-76	500	500	0	900	900	0	1500	1500	0
Type3-77	500	500	0	900	900	0	1500	1500	0
Type3-78	600	600	0	800	800	0	1400	1400	0
Type3-79	500	500	0	900	900	0	1500	1500	0
Type3-80	500	500	0	900	900	0	1500	1500	0
Type3-81	500	500	0	900	900	0	1400	1200	17

Type3-82	600	600	0	800	800	0	1400	1400	0
Type3-83	500	500	0	900	900	0	1500	1500	0
Type3-84	500	500	0	800	800	0	1200	1200	0
Type3-85	500	500	0	800	700	14	1200	1200	0
Type3-86	500	500	0	800	800	0	1200	1200	0
Type3-87	500	600	-17	800	700	14	1200	1100	9
Type3-88	500	500	0	800	800	0	1200	1200	0
Type3-89	500	500	0	800	800	0	1200	1200	0
Type3-90	600	700	-14	800	900	-11	1500	1500	0
Type3-91	700	900	-22	800	800	0	1500	1500	0
Type3-92	1200	1200	0	800	800	0	1500	1500	0
Type3-93	650	700	-7	800	900	-11	1500	1500	0
Type3-94	1200	1200	0	800	800	0	1500	1500	0
Type3-95	650	700	-7	800	900	-11	1500	1500	0
Type3-96	1200	1200	0	800	800	0	1500	1500	0
Type3-97	600	600	0	1000	1000	0	1500	1500	0
Type3-98	600	600	0	1000	900	11	1500	1500	0
Type3-99	600	600	0	1000	900	11	1500	1500	0
Type3-100	600	600	0	900	900	0	1500	1500	0
Type3-101	600	600	0	900	900	0	1500	1500	0
Type3-102	600	600	0	1000	1000	0	1500	1500	0
Type3-103	600	600	0	1000	1000	0	1500	1500	0

Table D.4: Estimated and target SEG for building type 4

	Bean	n width /	mm	Bean	n depth /ı	mm	Colun	nn width	/mm
Building	Estimate	Targe	Error/	Estimate	Targe	Error/	Estimate	Torgot	Error/
Dunding	d	t	%	d	t	%	d	Target	%
Type4-1	500	400	25	600	600	0	900	800	13
Type4-2	500	400	25	600	600	0	900	800	13
Type4-3	600	600	0	600	600	0	900	900	0
Type4-4	600	600	0	600	600	0	900	900	0
Type4-5	500	400	25	700	700	0	900	800	13
Type4-6	500	600	-17	600	600	0	900	900	0
Type4-7	500	600	-17	700	700	0	900	900	0
Type4-8	600	600	0	700	700	0	900	900	0
Type4-9	600	600	0	600	600	0	900	900	0
Type4-10	600	600	0	600	600	0	900	900	0
Type4-11	600	600	0	600	600	0	900	900	0
Type4-12	500	400	25	600	600	0	900	800	13
Type4-13	500	600	-17	600	700	-14	900	900	0
Type4-14	500	500	0	700	700	0	900	900	0
Type4-15	500	500	0	700	700	0	900	900	0
Type4-16	500	500	0	700	700	0	900	900	0
Type4-17	500	600	-17	600	600	0	900	900	0
Type4-18	500	600	-17	600	600	0	900	900	0

Type4-19	600	600	0	700	700	0	900	900	0
Type4-20	600	500	20	700	700	0	900	900	0
Type4-21	600	600	0	600	600	0	900	900	0
Type4-22	500	400	25	600	600	0	900	800	13
Type4-23	500	500	0	600	600	0	900	900	0
Type4-24	500	500	0	700	700	0	900	900	0
Type4-25	500	500	0	700	700	0	900	900	0
Type4-26	300	300	0	700	700	0	900	800	13
Type4-27	600	500	20	600	600	0	900	900	0
Type4-28	500	400	25	600	600	0	900	800	13
Type4-29	500	500	0	600	600	0	900	900	0
Type4-30	500	500	0	700	700	0	900	900	0
Type4-30	500	500	0	700	700	0	900	900	0
	500	500	0	700	700	0	900	900	0
Type4-32 Type4-33	500	500	0	700	700	0	900	900	0
Type4-33	500	400	25	600	600	0	900	800	13
Type4-34 Type4-35	500	500	0	700	700	0	900	900	0
Type4-35 Type4-36	400	600	-33	700	700	0	1000	1100	-9
Type4-30	400	400	0	700	700	0	900	900	0
Type4-37 Type4-38	500	500	0	700	700	0	1000	1200	-17
Type4-38	500	500	0	800	800	0	1000	1400	-29
Type4-39 Type4-40	500	500	0	700	700	0	1000	1200	-17
Type4-40	500	500	0	700	700	0	1000	1100	-9
Type4-41	450	500	-10	700	700	0	1000	1100	<u>-9</u>
Type4-42	500	600	-17	700	700	0	1000	1100	<u>-9</u>
Type4-43	450	500	-10	800	900	-11	1000	1300	-23
Type4-45	450	500	-10	800	800	0	1000	1100	-9
Type4-46	450	500	-10	800	800	0	1000	1100	-9
Type4-47	450	500	-10	900	900	0	1000	1300	-23
Type4-48	500	500	0	800	900	-11	1000	1300	-23
Type4-49	500	600	-17	700	700	0	1000	1100	-9
Type4-50	500	600	-17	800	800	0	1000	1300	-23
Type4-51	400	400	0	700	700	0	900	900	0
Type4-51 Type4-52	350	400	-13	700	700	0	900	900	0
Type4-52	400	400	0	700	700	0	900	900	0
Type4-54	300	400	-25	700	700	0	900	900	0
Type4-55	450	500	-10	700	600	17	900	800	13
Type4-56	500	600	-17	800	800	0	1300	1300	0
Type4-57	700	700	0	900	900	0	1400	1500	-7
Type4-58	500	400	25	800	800	0	1300	1100	18
Type4-59	400	300	33	900	900	0	1300	1300	0
Type4-60	500	500	0	800	800	0	1400	1400	0
Type4-61	450	400	13	800	800	0	1300	1100	18
Type4-62	600	600	0	800	800	0	1300	1300	0
		l e	0						
Type4-63	300	300	0	1000	1000	0	1300	1200	8

Type4-64	450	400	13	800	800	0	1300	1100	18
Type4-65	300	300	0	1000	1000	0	1300	1300	0
Type4-66	600	600	0	800	800	0	1300	1300	0
Type4-67	600	600	0	800	800	0	1300	1300	0
Type4-68	600	500	20	900	900	0	1400	1400	0
Type4-69	600	700	-14	900	900	0	1400	1500	-7
Type4-70	700	700	0	800	800	0	1200	1000	20
Type4-71	700	700	0	800	800	0	1200	1000	20
Type4-72	700	700	0	800	800	0	1200	1200	0
Type4-73	700	700	0	800	800	0	1200	1200	0
Type4-74	600	700	-14	800	800	0	1200	1000	20
Type4-75	600	700	-14	800	800	0	1200	1200	0
Type4-76	600	700	-14	800	800	0	1200	1200	0
Type4-77	700	700	0	800	800	0	1200	1200	0
Type4-78	700	700	0	800	800	0	1200	1200	0
Type4-79	700	700	0	800	800	0	1200	1200	0
Type4-80	700	700	0	800	800	0	1200	1200	0
Type4-81	700	700	0	800	800	0	1200	1000	20
Type4-82	700	700	0	800	800	0	1200	1200	0
Type4-83	700	700	0	800	800	0	1200	1200	0
Type4-84	372	300	24	1100	1300	-15	1500	1500	0
Type4-85	450	500	-10	1100	900	22	1500	1400	7
Type4-86	400	300	33	1200	1300	-8	1500	1500	0
Type4-87	400	400	0	1200	1100	9	1500	1500	0
Type4-88	400	400	0	1200	1200	0	1500	1500	0
Type4-89	300	300	0	1200	1300	-8	1500	1500	0
Type4-90	400	400	0	1200	1100	9	1500	1500	0
Type4-91	800	800	0	900	900	0	1300	1300	0
Type4-92	802	800	0	900	900	0	1300	1300	0
Type4-93	800	800	0	900	900	0	1300	1300	0
Type4-94	889	900	-1	1000	1000	0	1400	1300	8
Type4-95	889	900	-1	1000	1000	0	1400	1400	0
Type4-96	800	900	-11	1000	1000	0	1400	1400	0
Type4-97	900	900	0	1000	1000	0	1400	1300	8
Type4-98	800	900	-11	1000	1000	0	1400	1300	8

Table D.5: Estimated and target SEG for building type 5

	Bean	Beam width /mm			n depth /	mm	Column width /mm		
Duilding	Estimate	Targe	Error/	Estimate	Targe	Error/	Estimate	Targe	Error/
Building	d	t	%	d	t	%	d	t	%
Type5-1	400	400	0	550	550	0	750	750	0
Type5-2	500	500	0	550	550	0	800	800	0
Type5-3	450	400	13	600	600	0	800	700	14
Type5-4	450	400	13	600	600	0	800	750	7
Type5-5	450	400	13	600	600	0	800	750	7

Type5-6	450	350	29	600	600	0	800	750	7
Type5-7	450	350	29	600	600	0	800	750	7
Type5-8	500	500	0	600	600	0	800	800	0
Type5-9	450	450	0	600	600	0	800	800	0
Type5-10	400	400	0	700	700	0	1000	900	11
Type5-11	500	500	0	800	800	0	1200	1200	0
Type5-12	600	600	0	700	700	0	1200	1200	0
Type5-13	600	600	0	800	800	0	1200	1200	0
Type5-14	700	700	0	700	700	0	1200	1200	0
Type5-15	700	700	0	700	700	0	1200	1200	0
Type5-16	600	600	0	800	800	0	1200	1200	0
Type5-17	700	700	0	700	700	0	1200	1200	0
Type5-18	700	700	0	700	700	0	1200	1200	0
Type5-19	700	700	0	600	600	0	1100	1100	0
Type5-20	600	600	0	700	700	0	1200	1200	0
Type5-21	800	800	0	600	600	0	1200	1200	0
Type5-22	700	700	0	700	700	0	1200	1200	0
Type5-23	800	800	0	600	600	0	1200	1200	0
Type5-24	500	500	0	700	700	0	1200	1200	0
Type5-25	700	700	0	700	700	0	1200	1200	0
Type5-26	700	700	0	700	700	0	1200	1200	0
Type5-27	500	500	0	700	700	0	1100	1100	0
Type5-28	700	700	0	700	700	0	1200	1200	0
Type5-29	700	700	0	700	700	0	1200	1200	0
Type5-30	400	400	0	600	600	0	1000	900	11
Type5-31	400	400	0	700	700	0	1100	1100	0
Type5-32	700	700	0	600	600	0	1100	1100	0
Type5-33	700	700	0	700	700	0	1200	1200	0
Type5-34	500	500	0	700	700	0	1100	1100	0
Type5-35	500	500	0	700	700	0	1200	1200	0
Type5-36	500	500	0	700	700	0	1200	1200	0
Type5-37	700	700	0	700	700	0	1200	1200	0
Type5-38	700	700	0	700	700	0	1200	1200	0
Type5-39	700	700	0	700	700	0	1200	1200	0
Type5-40	500	500	0	700	700	0	1100	1100	0
Type5-41	500	500	0	700	700	0	1100	1100	0
Type5-42	600	600	0	700	700	0	1100	1100	0
Type5-43	500	500	0	700	700	0	1100	1100	0
Type5-44	600	600	0	800	800	0	1200	1200	0
Type5-45	500	500	0	700	700	0	1100	1100	0
Type5-46	800	800	0	700	700	0	1200	1200	0
Type5-47	500	500	0	800	800	0	1100	1100	0
Type5-48	400	400	0	700	700	0	1000	900	11
Type5-49	600	600	0	800	800	0	1200	1200	0
Type5-50	600	600	0	700	700	0	1000	1000	0

Type5-51	600	600	0	800	800	0	1200	1200	0
Type5-52	600	600	0	700	700	0	1100	1100	0
Type5-53	600	600	0	800	800	0	1200	1200	0
Type5-54	600	600	0	900	900	0	1200	1200	0
Type5-55	800	800	0	700	700	0	1200	1200	0
Type5-56	400	300	33	900	900	0	1000	1000	0
Type5-57	500	500	0	800	800	0	1100	1100	0
Type5-58	800	800	0	700	700	0	1200	1200	0
Type5-59	600	600	0	800	800	0	1200	1200	0
Type5-60	800	800	0	700	700	0	1200	1200	0
Type5-61	500	500	0	800	800	0	1100	1100	0
Type5-62	600	600	0	800	800	0	1200	1200	0
Type5-63	500	500	0	700	700	0	1100	1100	0
Type5-64	500	500	0	700	700	0	1000	1000	0
Type5-65	500	500	0	900	900	0	1200	1200	0
Type5-66	600	600	0	800	800	0	1200	1200	0
Type5-67	600	600	0	800	800	0	1200	1200	0
Type5-68	500	500	0	700	700	0	1100	1100	0
Type5-69	700	700	0	600	600	0	1000	1000	0
Type5-70	500	500	0	700	700	0	1100	1100	0
Type5-71	600	600	0	800	800	0	1200	1200	0
Type5-72	700	700	0	700	700	0	1200	1200	0
Type5-73	600	600	0	700	700	0	1100	1100	0
Type5-74	800	800	0	700	700	0	1200	1200	0
Type5-75	500	500	0	700	700	0	1100	1100	0
Type5-76	600	600	0	700	700	0	1100	1100	0
Type5-77	500	500	0	800	800	0	1100	1100	0
Type5-78	800	800	0	700	700	0	1200	1200	0
Type5-79	500	500	0	700	700	0	1100	1100	0
Type5-80	700	700	0	700	700	0	1200	1200	0
Type5-81	600	600	0	800	800	0	1200	1200	0
Type5-82	600	600	0	700	700	0	1100	1100	0
Type5-83	600	600	0	800	800	0	1200	1200	0
Type5-84	700	700	0	700	700	0	1200	1200	0
Type5-85	800	800	0	700	700	0	1200	1200	0
Type5-86	700	700	0	700	700	0	1200	1200	0
Type5-87	600	600	0	700	700	0	1100	1100	0
Type5-88	700	700	0	700	700	0	1200	1200	0
Type5-89	500	500	0	800	800	0	1100	1100	0
Type5-90	600	600	0	800	800	0	1200	1200	0
Type5-91	800	800	0	700	700	0	1200	1200	0
Type5-92	600	600	0	800	800	0	1200	1200	0
Type5-93	500	500	0	700	700	0	1100	1100	0
Type5-94	500	500	0	800	800	0	1200	1200	0
Type5-95	700	700	0	600	600	0	1000	1000	0

Type5-96	600	600	0	800	800	0	1200	1200	0
Type5-97	600	600	0	800	800	0	1200	1200	0
Type5-98	700	700	0	700	700	0	1200	1200	0
Type5-99	600	600	0	600	600	0	1000	1000	0
Type5-100	400	400	0	700	700	0	1000	1000	0
Type5-101	600	600	0	700	700	0	1200	1200	0
Type5-102	500	500	0	700	700	0	1100	1100	0
Type5-103	600	600	0	700	700	0	1200	1200	0
Type5-104	600	600	0	700	700	0	1200	1200	0
Type5-105	500	500	0	600	600	0	1000	1000	0
Type5-106	500	500	0	700	700	0	1100	1100	0
Type5-107	600	600	0	700	700	0	1200	1200	0
Type5-108	600	600	0	700	700	0	1200	1200	0
Type5-109	600	600	0	600	600	0	1000	1000	0
Type5-110	400	400	0	600	600	0	1000	900	11
Type5-111	600	600	0	600	600	0	1000	1000	0
Type5-112	500	500	0	700	700	0	1100	1100	0
Type5-113	400	400	0	700	700	0	1000	1000	0
Type5-114	600	600	0	600	600	0	1100	1100	0
Type5-115	600	600	0	700	700	0	1200	1200	0
Type5-116	600	600	0	700	700	0	1200	1200	0
Type5-117	600	600	0	700	700	0	1200	1200	0
Type5-118	600	600	0	700	700	0	1200	1200	0
Type5-119	600	600	0	700	700	0	1200	1200	0
Type5-120	600	600	0	700	700	0	1200	1200	0
Type5-121	400	400	0	800	800	0	1000	1000	0
Type5-122	500	500	0	800	800	0	1200	1200	0
Type5-123	500	500	0	700	700	0	1100	1100	0
Type5-124	600	600	0	700	700	0	1200	1200	0
Type5-125	500	500	0	700	700	0	1100	1100	0
Type5-126	600	600	0	800	800	0	1200	1200	0
Type5-127	600	600	0	700	700	0	1200	1200	0
Type5-128	600	600	0	700	700	0	1200	1200	0
Type5-129	600	600	0	800	800	0	1200	1200	0
Type5-130	500	500	0	700	700	0	1100	1100	0
Type5-131	600	600	0	800	800	0	1200	1200	0
Type5-132	600	600	0	800	800	0	1200	1200	0
Type5-133	600	600	0	800	800	0	1200	1200	0
Type5-134	400	400	0	700	700	0	1000	900	11
Type5-135	500	500	0	700	700	0	1100	1100	0
Type5-136	500	500	0	700	700	0	1100	1100	0
Type5-137	400	400	0	800	800	0	1000	1000	0
Type5-138	500	500	0	900	900	0	1200	1200	0
Type5-139	600	600	0	800	800	0	1200	1200	0
Type5-140	500	500	0	900	900	0	1200	1200	0

Type5-141	600	600	0	800	800	0	1200	1200	0
Type5-141 Type5-142	700	700	0	700	700	0	1100	1100	0
Type5-142	600	600	0	800	800	0	1200	1200	0
Type5-144	600	600	0	800	800	0	1200	1200	0
Type5-145	600	600	0	800	800	0	1200	1200	0
Type5-146	400	400	0	900	900	0	1200	1200	0
Type5-140	500	500	0	700	700	0	1100	1100	0
Type5-147	400	400	0	800	800	0	1000	1000	0
Type5-149	500	500	0	700	700	0	1000	1000	0
Type5-149	600	600	0	800	800	0	1200	1200	0
Type5-151	400	400	0	900	900	0	1200	1200	0
Type5-151	500	500	0	900	900	0	1200	1200	0
Type5-153	600	600	0	800	800	0	1200	1200	0
Type5-154	400	400	0	900	900	0	1200	1200	0
Type5-155	500	500	0	700	700	0	1100	1100	0
Type5-156	400	400	0	800	800	0	1000	1000	0
Type5-157	600	600	0	700	700	0	1100	1100	0
Type5-158	500	500	0	700	700	0	1100	1100	0
Type5-159	600	600	0	800	800	0	1200	1200	0
Type5-160	500	500	0	700	700	0	1100	1100	0
Type5-161	600	600	0	800	800	0	1200	1200	0
Type5-162	500	500	0	700	700	0	1100	1100	0
Type5-163	500	500	0	700	700	0	1100	1100	0
Type5-164	400	400	0	900	900	0	1200	1200	0
Type5-165	600	600	0	700	700	0	1200	1200	0
Type5-166	500	500	0	700	700	0	1100	1100	0
Type5-167	500	500	0	700	700	0	1100	1100	0
Type5-168	600	600	0	700	700	0	1200	1200	0
Type5-169	600	600	0	800	800	0	1200	1200	0
Type5-170	400	300	33	800	800	0	1000	1000	0
Type5-171	400	300	33	800	800	0	1000	1000	0
Type5-172	500	500	0	700	700	0	1000	1000	0
Type5-173	500	500	0	700	700	0	1100	1100	0
Type5-174	600	600	0	700	700	0	1200	1200	0
Type5-175	600	600	0	800	800	0	1200	1200	0
Type5-176	600	600	0	700	700	0	1200	1200	0
Type5-177	600	600	0	700	700	0	1200	1200	0
Type5-178	500	500	0	700	700	0	1100	1100	0
Type5-179	600	600	0	700	700	0	1200	1200	0
Type5-180	600	600	0	700	700	0	1200	1200	0
Type5-181	600	600	0	800	800	0	1200	1200	0
Type5-182	500	500	0	700	700	0	1100	1100	0
Type5-183	400	400	0	600	600	0	800	800	0
Type5-184	400	400	0	600	600	0	1000	1000	0
Type5-185	400	400	0	600	600	0	800	800	0

Type5-186	400	400	0	600	600	0	1000	1000	0
Type5-187	400	400	0	600	600	0	800	800	0
Type5-188	500	500	0	600	600	0	900	900	0
Type5-189	400	400	0	600	600	0	1000	1000	0
Type5-190	600	600	0	500	500	0	800	800	0
Type5-191	400	400	0	600	600	0	800	800	0
Type5-192	500	500	0	600	600	0	900	900	0
Type5-193	400	400	0	600	600	0	800	800	0
Type5-194	400	400	0	500	500	0	700	700	0
Type5-195	500	500	0	500	500	0	800	800	0
Type5-196	500	500	0	500	500	0	700	700	0
Type5-197	400	400	0	600	600	0	1000	1000	0
Type5-198	400	400	0	600	600	0	800	800	0
Type5-199	400	400	0	600	600	0	800	800	0
Type5-200	400	400	0	600	600	0	1000	1000	0
Type5-201	400	400	0	600	600	0	1000	1000	0
Type5-202	400	400	0	600	600	0	800	800	0
Type5-203	400	400	0	500	500	0	700	700	0
Type5-204	500	500	0	500	500	0	800	800	0
Type5-205	400	400	0	600	600	0	1000	1000	0
Type5-206	400	400	0	600	600	0	1000	1000	0
Type5-207	400	400	0	600	600	0	1000	1000	0
Type5-208	400	400	0	600	600	0	1000	1000	0
Type5-209	400	400	0	600	600	0	1000	1000	0
Type5-210	400	400	0	600	600	0	1000	1000	0
Type5-211	500	500	0	600	600	0	900	900	0
Type5-212	400	400	0	600	600	0	1000	1000	0
Type5-213	400	400	0	600	600	0	1000	1000	0
Type5-214	400	400	0	500	500	0	700	600	17
Type5-215	300	300	0	700	700	0	800	800	0
Type5-216	300	300	0	700	700	0	800	800	0
Type5-217	500	500	0	600	600	0	900	900	0
Type5-218	500	500	0	600	600	0	900	900	0
Type5-219	400	400	0	600	600	0	800	800	0
Type5-220	500	500	0	600	600	0	900	900	0
Type5-221	500	500	0	600	600	0	900	900	0
Type5-222	400	400	0	600	600	0	800	800	0
Type5-223	500	500	0	600	600	0	800	800	0
Type5-224	500	500	0	600	600	0	800	800	0
Type5-225	400	400	0	700	700	0	900	900	0
Type5-226	400	400	0	700	700	0	900	900	0
Type5-227	600	600	0	500	500	0	700	700	0
Type5-228	500	500	0	600	600	0	900	900	0
Type5-229	400	400	0	600	600	0	800	800	0
Type5-230	400	400	0	700	700	0	1000	1000	0

Type5-231	400	400	0	700	700	0	1000	1000	0
Type5-232	400	400	0	700	700	0	1000	1000	0
Type5-233	400	400	0	600	600	0	800	800	0
Type5-234	400	400	0	600	600	0	800	800	0
Type5-235	600	600	0	500	500	0	700	700	0
Type5-236	400	400	0	700	700	0	900	900	0
Type5-237	600	600	0	500	500	0	700	700	0
Type5-238	400	400	0	700	700	0	800	800	0
Type5-239	400	400	0	800	800	0	1000	1000	0
Type5-240	400	400	0	700	700	0	1000	1000	0
Type5-241	400	400	0	600	600	0	800	800	0
Type5-242	400	400	0	700	700	0	800	800	0
Type5-243	400	400	0	700	700	0	1000	1000	0
Type5-244	400	400	0	700	700	0	1000	1000	0
Type5-245	600	600	0	500	500	0	700	700	0
Type5-246	400	400	0	700	700	0	1000	1000	0
Type5-247	400	400	0	600	600	0	800	800	0
Type5-248	300	300	0	700	700	0	800	800	0
Type5-249	400	400	0	600	600	0	900	900	0
Type5-250	600	600	0	500	500	0	800	800	0
Type5-251	500	500	0	600	600	0	900	900	0
* *	400	400	0	600	600	0	800	800	0
Type5-252 Type5-253	400	400	0	600	600	0	800	800	0
Type5-254	500	500	0	600	600	0	900	900	0
Type5-255	400	400	0	600	600	0	800	800	0
Type5-256	500	500	0	600	600	0	900	900	0
Type5-257	500	500	0	600	600	0	900	900	0
Type5-258	400	400	0	600	600	0	800	800	0
Type5-259	500	500	0	600	600	0	900	900	0
Type5-260	400	400	0	600	600	0	800	800	0
Type5-261	300	300	0	700	700	0	800	800	0
Type5-262	500	500	0	500	500	0	800	700	14
Type5-263	400	400	0	600	600	0	800	800	0
Type5-264	600	600	0	500	500	0	800	800	0
Type5-265	600	600	0	500	500	0	800	800	0
Type5-266	400	400	0	600	600	0	800	800	0
Type5-267	400	400	0	600	600	0	800	800	0
Type5-268	400	400	0	600	600	0	800	800	0
Type5-269	400	400	0	600	600	0	800	800	0
Type5-270	500	500	0	600	600	0	900	900	0
Type5-271	500	500	0	600	600	0	900	900	0
Type5-272	500	500	0	600	600	0	900	900	0
Type5-273	400	400	0	600	600	0	800	800	0
Type5-274	500	500	0	500	500	0	800	700	14
Type5-275	500	500	0	600	600	0	900	900	0

Type5-276	600	600	0	500	500	0	800	800	0
Type5-277	500	500	0	600	600	0	900	900	0
Type5-278	400	400	0	600	600	0	800	800	0
Type5-279	500	500	0	600	600	0	900	900	0
Type5-280	400	400	0	600	600	0	800	800	0
Type5-281	600	600	0	500	500	0	800	800	0
Type5-282	500	500	0	600	600	0	900	900	0
Type5-283	500	500	0	600	600	0	900	900	0
Type5-284	400	400	0	800	800	0	1200	1200	0
Type5-285	900	900	0	700	700	0	1200	1200	0
Type5-286	800	800	0	600	600	0	1200	1200	0
Type5-287	900	900	0	700	700	0	1200	1200	0
Type5-288	400	400	0	800	800	0	1100	1100	0
Type5-289	800	800	0	700	700	0	1200	1200	0
Type5-290	300	300	0	1000	1000	0	1200	1200	0
Type5-291	300	300	0	1000	1000	0	1200	1200	0
Type5-292	900	900	0	700	700	0	1200	1200	0
Type5-293	900	900	0	700	700	0	1200	1200	0
Type5-294	800	800	0	700	700	0	1200	1200	0
Type5-295	900	900	0	700	700	0	1200	1200	0
Type5-296	900	900	0	700	700	0	1200	1200	0
Type5-297	500	500	0	800	800	0	1200	1100	9
Type5-298	900	900	0	700	700	0	1200	1200	0
Type5-299	800	800	0	700	700	0	1200	1200	0
Type5-300	300	300	0	800	800	0	1200	1200	0
Type5-301	800	800	0	700	700	0	1200	1200	0
Type5-302	500	500	0	700	700	0	1200	1200	0
Type5-303	600	600	0	800	800	0	1200	1200	0
Type5-304	900	900	0	600	600	0	1200	1200	0
Type5-305	600	600	0	700	700	0	1200	1200	0
Type5-306	600	600	0	800	800	0	1200	1200	0
Type5-307	700	700	0	700	700	0	1200	1200	0
Type5-308	700	700	0	700	700	0	1200	1200	0
Type5-309	300	300	0	900	900	0	1200	1200	0
Type5-310	500	500	0	800	800	0	1200	1200	0
Type5-311	600	600	0	700	700	0	1200	1200	0
Type5-312	800	800	0	600	600	0	1200	1200	0
Type5-313	300	300	0	900	900	0	1200	1200	0
Type5-314	700	700	0	700	700	0	1200	1200	0
Type5-315	800	800	0	700	700	0	1200	1200	0
Type5-316	600	600	0	700	700	0	1200	1200	0
Type5-317	800	800	0	700	700	0	1200	1200	0
Type5-318	500	500	0	800	800	0	1200	1200	0
Type5-319	600	600	0	800	800	0	1200	1200	0
Type5-320	600	600	0	700	700	0	1200	1200	0

Type5-321	500	500	0	700	700	0	1100	1100	0
Type5-322	800	900	-11	600	600	0	1200	1200	0
Type5-323	700	700	0	700	700	0	1200	1200	0
Type5-324	600	600	0	700	700	0	1200	1200	0
Type5-325	700	700	0	700	700	0	1200	1200	0
Type5-326	600	600	0	700	700	0	1200	1200	0
Type5-327	700	700	0	600	600	0	1200	1200	0
Type5-328	400	400	0	800	800	0	1200	1200	0
Type5-329	500	500	0	700	700	0	1200	1200	0
Type5-330	700	700	0	600	600	0	1200	1200	0
Type5-331	600	600	0	700	700	0	1200	1200	0
Type5-332	600	600	0	700	700	0	1200	1200	0
Type5-333	700	700	0	700	700	0	1200	1200	0
Type5-334	400	400	0	700	700	0	1200	1200	0
Type5-335	700	700	0	600	600	0	1200	1200	0
Type5-336	300	300	0	1000	1000	0	1100	1100	0
Type5-337	600	600	0	700	700	0	1200	1200	0
Type5-338	400	400	0	800	800	0	1200	1200	0
Type5-339	600	600	0	700	700	0	1200	1200	0
Type5-340	600	600	0	700	700	0	1200	1200	0
Type5-341	600	600	0	800	800	0	1200	1200	0
Type5-342	500	500	0	800	800	0	1200	1200	0
Type5-343	700	700	0	700	700	0	1200	1200	0
Type5-344	600	600	0	800	800	0	1200	1200	0
Type5-345	700	700	0	700	700	0	1200	1200	0
Type5-346	600	600	0	800	800	0	1200	1200	0
Type5-347	600	600	0	800	800	0	1200	1200	0
Type5-348	400	400	0	900	900	0	1200	1200	0
Type5-349	600	600	0	700	700	0	1200	1200	0
Type5-350	700	700	0	700	700	0	1200	1200	0
Type5-351	400	400	0	800	800	0	1200	1200	0
Type5-352	600	600	0	700	700	0	1200	1200	0
Type5-353	700	700	0	700	700	0	1200	1200	0
Type5-354	600	600	0	700	700	0	1200	1200	0
Type5-355	300	300	0	900	900	0	1200	1200	0
Type5-356	600	600	0	700	700	0	1200	1200	0
Type5-357	600	600	0	700	700	0	1200	1200	0
Type5-358	700	700	0	700	700	0	1200	1200	0
Type5-359	600	600	0	700	700	0	1200	1200	0
Type5-360	500	500	0	800	800	0	1200	1200	0
Type5-361	600	600	0	700	700	0	1200	1200	0
Type5-362	700	700	0	700	700	0	1200	1200	0
Type5-363	600	600	0	700	700	0	1200	1200	0

Appendix E: Structural element geometry estimations from regression and neural networks vs verification target structural element geometries

This appendix details SEG estimates generated from regression and neural network models detailed in **Error! Reference source not found.** for the five different target building types.

E.1 SEG estimates from regression models

Table E.1: Estimated and target SEG for building type 1

	Beam	width /r	nm	Beam	depth /r	nm	Colum	n width	/mm
	Regressio	Targe	Error/	Regressio	Targe	Error/	Regressio	Targe	Error/
Building	n	t	%	n	t	%	n	t	%
Type1-1	707	700	1.02	647	600	7.86	1023	1000	2.27
Type1-2	707	600	17.86	647	700	-7.55	1023	1000	2.27
Type1-3	707	700	1.02	647	600	7.86	1023	1000	2.27
Type1-4	691	600	15.24	660	700	-5.72	1016	1000	1.59
Type1-5	691	800	-13.57	660	600	10.00	1016	1000	1.59
Type1-6	679	600	13.14	670	700	-4.25	1011	1000	1.05
Type1-7	679	800	-15.14	670	600	11.71	1011	1000	1.05
Type1-8	679	600	13.14	670	700	-4.25	1011	1000	1.05
Type1-9	679	600	13.14	670	700	-4.25	1011	1000	1.05
Type1-10	704	500	40.82	670	800	-16.22	985	1000	-1.48
Type1-11	704	600	17.35	670	700	-4.25	985	1000	-1.48
Type1-12	704	700	0.59	670	600	11.71	985	1000	-1.48
Type1-13	688	700	-1.66	683	600	13.84	978	900	8.71
Type1-14	688	700	-1.66	683	600	13.84	978	1000	-2.16
Type1-15	688	600	14.73	683	700	-2.42	978	1000	-2.16
Type1-16	688	500	37.68	683	800	-14.62	978	1000	-2.16
Type1-17	676	500	35.17	693	800	-13.34	973	1000	-2.70
Type1-18	701	700	0.16	693	600	15.55	948	900	5.30
Type1-19	701	700	0.16	693	700	-0.95	948	900	5.30
Type1-20	701	700	0.16	693	800	-13.33	948	900	5.30
Type1-21	685	700	-2.09	706	600	17.69	941	900	4.55
Type1-22	685	700	-2.09	706	600	17.69	941	900	4.55
Type1-23	685	700	-2.09	706	800	-11.73	941	900	4.55
Type1-24	673	700	-3.88	716	600	19.40	935	900	3.94
Type1-25	806	800	0.78	743	700	6.08	1109	1100	0.77
Type1-26	806	800	0.78	743	700	6.08	1109	1100	0.77
Type1-27	806	900	-10.42	743	700	6.08	1109	1100	0.77
Type1-28	806	700	15.13	755	700	7.91	1118	1100	1.68
Type1-29	806	800	0.74	755	700	7.91	1118	1100	1.68
Type1-30	806	800	0.74	755	700	7.91	1118	1100	1.68
Type1-31	806	800	0.74	755	700	7.91	1118	1100	1.68

Type1-32	806	900	-10.48	766	800	-4.30	1126	1100	2.41
Type1-33	806	800	0.71	766	700	9.38	1126	1100	2.41
Type1-34	806	800	0.71	766	700	9.38	1126	1100	2.41
Type1-35	806	900	-10.48	766	800	-4.30	1126	1100	2.41
Type1-36	718	700	2.58	736	700	5.12	1014	1100	-7.82
Type1-37	718	600	19.62	749	800	-6.42	1024	1100	-6.92
Type1-38	718	600	19.62	749	800	-6.42	1024	1100	-6.92
Type1-39	717	600	19.58	759	700	8.41	1032	1100	-6.19
Type1-40	717	600	19.58	759	800	-5.14	1032	1100	-6.19
Type1-41	717	600	19.58	759	800	-5.14	1032	1100	-6.19
Type1-42	717	600	19.58	759	800	-5.14	1032	1100	-6.19
Type1-43	717	700	2.50	759	700	8.41	1032	1100	-6.19
Type1-44	630	800	-21.31	742	800	-7.26	929	1000	-7.07
Type1-45	630	800	-21.31	742	800	-7.26	929	1000	-7.07
Type1-46	629	800	-21.34	752	600	25.36	937	1000	-6.27
Type1-47	955	800	19.36	886	900	-1.59	1237	1300	-4.83
Type1-48	978	800	22.22	898	900	-0.17	1272	1300	-2.13
Type1-49	978	900	8.64	898	900	-0.17	1272	1300	-2.13
Type1-50	996	900	10.67	909	900	0.97	1300	1300	0.03
Type1-51	996	900	10.67	909	900	0.97	1300	1300	0.03
Type1-52	739	700	5.56	834	800	4.28	1057	1000	5.70
Type1-53	739	700	5.56	834	800	4.28	1057	1000	5.70
Type1-54	762	700	8.82	847	800	5.88	1092	1000	9.22
Type1-55	762	700	8.82	847	800	5.88	1092	1000	9.22
Type1-56	762	700	8.82	847	800	5.88	1092	1000	9.22
Type1-57	780	700	11.43	857	800	7.16	1120	1000	12.03
Type1-58	780	700	11.43	857	800	7.16	1120	1000	12.03
Type1-59	546	1000	-45.42	796	800	-0.55	912	1200	-24.00
Type1-60	580	400	45.00	998	1000	-0.18	1129	1400	-19.37
Type1-61	596	400	49.00	1011	1100	-8.09	1206	1400	-13.87
Type1-62	596	400	49.00	1011	1100	-8.09	1206	1400	-13.87
Type1-63	596	400	49.00	1011	1100	-8.09	1206	1400	-13.87
Type1-64	596	400	49.00	1011	1000	1.10	1206	1400	-13.87
Type1-65	604	400	51.00	1021	1100	-7.16	1268	1400	-9.46
Type1-66	604	400	51.00	1021	1100	-7.16	1268	1400	-9.46
Type1-67	604	400	51.00	1021	1100	-7.16	1268	1400	-9.46

Table E.2: Estimated and target SEG for building type 2

	Beam	width /r	nm	Beam	depth /r	nm	Column width /mm		
	Regressio	Targe	Error/	Regressio	Targe	Error/	Regressio	Targe	Error/
Building	n	t	%	n	t	%	n	t	%
Type2-1	672	700	-4.01	757	800	-5.40	961	900	6.82
Type2-2	672	700	-4.01	757	800	-5.40	961	900	6.82
Type2-3	672	700	-4.01	757	800	-5.40	961	900	6.82
Type2-4	672	700	-4.01	757	800	-5.40	961	900	6.82

Type2-5	672	700	-4.01	757	800	-5.40	961	1000	-3.86
Type2-6	672	700	-4.01	757	800	-5.40	961	900	6.82
Type2-7	672	700	-4.01	757	800	-5.40	961	900	6.82
Type2-8	672	700	-4.01	753	800	-5.82	958	900	6.39
Type2-9	672	700	-4.01	753	800	-5.82	958	1000	-4.25
Type2-10	672	700	-4.01	753	800	-5.82	958	1000	-4.25
Type2-11	672	700	-4.01	753	800	-5.82	958	900	6.39
Type2-12	672	700	-4.01	753	800	-5.82	958	900	6.39
Type2-13	672	700	-4.01	753	800	-5.82	958	1000	-4.25
Type2-14	672	700	-4.01	753	800	-5.82	958	900	6.39
Type2-15	672	700	-4.01	751	800	-6.16	954	900	6.05
Type2-16	672	700	-4.01	751	800	-6.16	954	1000	-4.56
Type2-17	672	700	-4.01	751	800	-6.16	954	1000	-4.56
Type2-18	672	700	-4.01	751	800	-6.16	954	900	6.05
Type2-19	672	700	-4.01	751	800	-6.16	954	900	6.05
Type2-20	672	700	-4.01	751	800	-6.16	954	1000	-4.56
Type2-21	672	700	-4.01	751	800	-6.16	954	900	6.05
Type2-22	586	500	17.18	668	600	11.30	913	700	30.47
Type2-23	586	500	17.18	668	600	11.30	913	700	30.47
Type2-24	586	500	17.18	668	600	11.30	913	800	14.16
Type2-25	586	500	17.18	668	600	11.30	913	700	30.47
Type2-26	586	500	17.18	668	600	11.30	913	700	30.47
Type2-27	586	500	17.18	668	600	11.30	913	700	30.47
Type2-28	586	500	17.18	668	600	11.30	913	700	30.47
Type2-29	586	500	17.18	668	600	11.30	913	700	30.47
Type2-30	586	500	17.18	668	600	11.30	913	700	30.47
Type2-31	586	500	17.18	668	600	11.30	913	800	14.16
Type2-32	586	500	17.18	668	600	11.30	913	800	14.16
Type2-33	586	500	17.18	672	600	12.07	909	700	29.92
Type2-34	586	500	17.18	672	600	12.07	909	700	29.92
Type2-35	586	500	17.18	672	600	12.07	909	700	29.92
Type2-36	586	500	17.18	672	600	12.07	909	700	29.92
Type2-37	586	500	17.18	672	600	12.07	909	800	13.68
Type2-38	586	500	17.18	672	600	12.07	909	700	29.92
Type2-39	586	500	17.18	672	600	12.07	909	700	29.92
Type2-40	586	500	17.18	676	600	12.68	906	700	29.47
Type2-41	586	500	17.18	676	600	12.68	906	800	13.29
Type2-42	586	500	17.18	676	600	12.68	906	800	13.29
Type2-43	586	500	17.18	676	600	12.68	906	700	29.47
Type2-44	586	500	17.18	676	600	12.68	906	800	13.29
Type2-45	586	500	17.18	676	600	12.68	906	700	29.47
Type2-46	586	500	17.18	676	600	12.68	906	800	13.29
Type2-47	500	400	24.98	579	600	-3.54	865	800	8.15
Type2-48	500	500	-0.02	579	500	15.76	865	700	23.59
Type2-49	500	500	-0.02	579	700	-17.32	865	900	-3.87

Typo2 50	500	400	24.98	579	600	-3.54	865	700	23.59
Type2-50 Type2-51	500	500	-0.02	579	500	15.76	865	700	23.59
Type2-52	500	500	-0.02	591	600	-1.44	861	900	-4.30
**	500	500	-0.02	591	700		861	900	
Type2-53	500	500			700	-15.52	861	900	-4.30 -4.30
Type2-54	500	500	-0.02	591		-15.52	858		
Type2-55			-0.02	601	700	-14.08		900	-4.64
Type2-56	500	500	-0.02	601	700	-14.08	858	900	-4.64
Type2-57	500	500	-0.02	601	700	-14.08	858	900	-4.64
Type2-58	500	500	-0.02	601	700	0.24	858	900	-4.64
Type2-59	500	500	-0.02	601	700	-14.08	858	900	-4.64
Type2-60	500	400	24.98	601	600	0.24	858	800	7.28
Type2-61	500	500	-0.02	601	600	0.24	858	900	-4.64
Type2-62	726	700	3.76	814	800	1.73	1069	1000	6.87
Type2-63	726	700	3.76	814	800	1.73	1069	1100	-2.84
Type2-64	726	700	3.76	814	800	1.73	1069	900	18.75
Type2-65	726	700	3.76	814	800	1.73	1069	1200	-10.94
Type2-66	726	700	3.76	814	800	1.73	1069	1000	6.87
Type2-67	726	700	3.76	814	800	1.73	1069	1100	-2.84
Type2-68	726	700	3.76	814	800	1.73	1069	1200	-10.94
Type2-69	726	700	3.76	810	800	1.31	1079	1100	-1.94
Type2-70	726	700	3.76	810	800	1.31	1079	1200	-10.11
Type2-71	726	700	3.76	810	800	1.31	1079	900	19.85
Type2-72	726	700	3.76	810	800	1.31	1079	1000	7.86
Type2-73	726	700	3.76	810	800	1.31	1079	1200	-10.11
Type2-74	726	700	3.76	810	800	1.31	1079	1200	-10.11
Type2-75	726	700	3.76	810	800	1.31	1079	1000	7.86
Type2-76	726	700	3.76	810	800	1.31	1079	1100	-1.94
Type2-77	726	700	3.76	810	800	1.31	1079	1100	-1.94
Type2-78	726	700	3.76	810	800	1.31	1079	1000	7.86
Type2-79	726	700	3.76	810	800	1.31	1079	1000	7.86
Type2-80	726	700	3.76	810	800	1.31	1079	1200	-10.11
Type2-81	726	700	3.76	810	800	1.31	1079	1200	-10.11
Type2-82	726	700	3.76	808	800	0.97	1087	900	20.72
Type2-83	726	700	3.76	808	800	0.97	1087	1100	-1.23
Type2-84	726	700	3.76	808	800	0.97	1087	1200	-9.46
Type2-85	726	700	3.76	808	800	0.97	1087	1000	8.65
Type2-86	726	700	3.76	808	800	0.97	1087	1000	8.65
Type2-87	726	700	3.76	808	800	0.97	1087	1000	8.65
Type2-88	726	700	3.76	808	800	0.97	1087	1200	-9.46
Type2-89	726	700	3.76	808	800	0.97	1087	1000	8.65
Type2-90	726	700	3.76	808	800	0.97	1087	1200	-9.46
Type2-91	640	600	6.72	714	700	2.03	965	900	7.25
Type2-92	640	600	6.72	714	700	2.03	965	1100	-12.25
Type2-93	640	600	6.72	714	700	2.03	965	1000	-3.48
Type2-94	640	900	-28.85	714	800	-10.73	965	1100	-12.25

Type2-95	640	900	-28.85	714	700	2.03	965	1100	-12.25
Type2-96	640	600	6.72	714	700	2.03	965	1000	-3.48
Type2-97	640	600	6.72	714	700	2.03	965	1000	-3.48
Type2-98	640	800	-19.96	714	700	2.03	965	1100	-12.25
Type2-99	640	900	-28.85	714	800	-10.73	965	1100	-12.25
Type2-100	640	800	-19.96	719	700	2.68	975	1100	-11.35
Type2-101	640	900	-28.85	719	800	-10.15	975	1100	-11.35
Type2-102	640	600	6.72	719	700	2.68	975	1000	-2.49
Type2-103	640	900	-28.85	719	700	2.68	975	1100	-11.35
Type2-104	640	600	6.72	722	700	3.21	983	900	9.22
Type2-105	640	600	6.72	722	700	3.21	983	1100	-10.64
Type2-106	640	600	6.72	722	700	3.21	983	1000	-1.70
Type2-107	640	600	6.72	722	700	3.21	983	1100	-10.64
Type2-108	808	800	0.99	899	900	-0.07	1230	1200	2.48
Type2-109	808	800	0.99	899	900	-0.07	1230	1100	11.80
Type2-110	808	800	0.99	899	900	-0.07	1230	1200	2.48
Type2-111	808	800	0.99	899	900	-0.07	1230	1100	11.80
Type2-112	808	800	0.99	899	900	-0.07	1230	1200	2.48
Type2-113	808	800	0.99	896	900	-0.45	1260	1200	5.02
Type2-114	808	800	0.99	896	900	-0.45	1260	1200	5.02
Type2-115	808	800	0.99	896	900	-0.45	1260	1200	5.02
Type2-116	808	800	0.99	896	900	-0.45	1260	1300	-3.06
Type2-117	808	800	0.99	893	900	-0.75	1285	1200	7.05
Type2-118	808	800	0.99	893	900	-0.75	1285	1200	7.05
Type2-119	808	800	0.99	893	900	-0.75	1285	1200	7.05
Type2-120	808	800	0.99	893	900	-0.75	1285	1300	-1.18
Type2-121	722	700	3.14	784	800	-2.03	1043	900	15.91
Type2-122	722	700	3.14	784	800	-2.03	1043	900	15.91
Type2-123	722	700	3.14	784	800	-2.03	1043	900	15.91
Type2-124	722	700	3.14	784	800	-2.03	1043	900	15.91
Type2-125	722	700	3.14	784	800	-2.03	1043	900	15.91
Type2-126	722	700	3.14	784	800	-2.03	1043	1000	4.32
Type2-127	722	700	3.14	784	800	-2.03	1043	1000	4.32
Type2-128	722	700	3.14	784	800	-2.03	1043	900	15.91
Type2-129	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-130	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-131	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-132	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-133	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-134	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-135	722	700	3.14	788	800	-1.46	1074	1000	7.36
Type2-136	722	700	3.14	788	800	-1.46	1074	1000	7.36
Type2-137	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-138	722	700	3.14	788	800	-1.46	1074	900	19.29
Type2-139	722	700	3.14	788	800	-1.46	1074	900	19.29

Type2-140	722	700	3.14	788	800	-1.46	1074	1000	7.36
Type2-141	722	700	3.14	792	800	-1.00	1098	900	22.00
Type2-142	722	700	3.14	792	800	-1.00	1098	1000	9.80
Type2-143	722	700	3.14	792	800	-1.00	1098	900	22.00
Type2-144	722	700	3.14	792	800	-1.00	1098	900	22.00
Type2-145	722	700	3.14	792	800	-1.00	1098	900	22.00
Type2-146	722	700	3.14	792	800	-1.00	1098	900	22.00
Type2-147	722	700	3.14	792	800	-1.00	1098	900	22.00
Type2-148	722	700	3.14	792	800	-1.00	1098	900	22.00
Type2-149	722	700	3.14	792	800	-1.00	1098	1000	9.80
Type2-150	636	700	-9.15	668	800	-16.49	857	1000	-14.35
Type2-151	636	700	-9.15	668	800	-16.49	857	1200	-28.62
Type2-152	636	700	-9.15	668	800	-16.49	857	1200	-28.62
Type2-153	636	700	-9.15	668	800	-16.49	857	1200	-28.62
Type2-154	636	700	-9.15	668	800	-16.49	857	1000	-14.35
Type2-155	636	700	-9.15	668	800	-16.49	857	1200	-28.62
Type2-156	636	700	-9.15	668	800	-16.49	857	1000	-14.35
Type2-157	636	700	-9.15	681	800	-14.92	887	1200	-26.08
Type2-158	636	700	-9.15	681	800	-14.92	887	1200	-26.08
Type2-159	636	700	-9.15	681	800	-14.92	887	1200	-26.08
Type2-160	636	700	-9.15	681	800	-14.92	887	1200	-26.08
Type2-161	636	700	-9.15	681	800	-14.92	887	1200	-26.08
Type2-162	636	700	-9.15	681	800	-14.92	887	1200	-26.08
Type2-163	636	700	-9.15	691	800	-13.66	911	1000	-8.86
Type2-164	636	700	-9.15	691	800	-13.66	911	1200	-24.05
Type2-165	636	700	-9.15	691	800	-13.66	911	1200	-24.05
Type2-166	636	700	-9.15	691	800	-13.66	911	1200	-24.05
Type2-167	636	700	-9.15	691	800	-13.66	911	1000	-8.86
Type2-168	636	700	-9.15	691	800	-13.66	911	1000	-8.86
Type2-169	636	700	-9.15	691	800	-13.66	911	1200	-24.05
Type2-170	558	300	86.00	900	1000	-10.03	1173	1500	-21.80
Type2-171	558	300	86.00	900	1200	-25.03	1173	1500	-21.80
Type2-172	858	900	-4.67	900	800	12.46	1173	1500	-21.80
Type2-173	858	800	7.25	900	800	12.46	1173	1500	-21.80
Type2-174	858	900	-4.67	900	800	12.46	1173	1500	-21.80
Type2-175	558	300	86.00	904	1100	-17.80	1238	1500	-17.48
Type2-176	558	300	86.00	904	1200	-24.65	1238	1500	-17.48
Type2-177	858	900	-4.67	904	800	13.03	1238	1500	-17.48
Type2-178	858	900	-4.67	904	800	13.03	1238	1500	-17.48
Type2-179	858	900	-4.67	904	800	13.03	1238	1500	-17.48
Type2-180	558	300	86.00	904	1100	-17.80	1238	1500	-17.48
Type2-181	858	900	-4.67	904	800	13.03	1238	1500	-17.48
Type2-182	858	800	7.25	904	900	0.47	1238	1500	-17.48
Type2-183	558	300	86.00	908	1100	-17.46	1290	1500	-14.02
Type2-184	558	300	86.00	908	1200	-24.34	1290	1500	-14.02

Type2-185	858	900	-4.67	908	800	13.49	1290	1500	-14.02
Type2-186	858	900	-4.67	908	800	13.49	1290	1500	-14.02
Type2-187	858	900	-4.67	908	800	13.49	1290	1500	-14.02
Type2-188	858	900	-4.67	908	800	13.49	1290	1500	-14.02
Type2-189	858	900	-4.67	908	800	13.49	1290	1500	-14.02

Table E.3: Estimated and target SEG for building type 3

	Beam	width /r	nm	Beam	depth /r	nm	Colum	n width	/mm
	Regressio	Targe	Error/	Regressio	Targe	Error/	Regressio	Targe	Error/
Building	n	t	%	n	t	%	n	t	%
Type3-1	553	500	10.56	707	600	17.78	1062	900	18.02
Type3-2	553	500	10.56	707	600	17.78	1062	900	18.02
Type3-3	553	500	10.56	697	700	-0.45	1062	1200	-11.48
Type3-4	544	500	8.77	727	800	-9.10	1075	1100	-2.31
Type3-5	544	600	-9.36	727	700	3.89	1075	1000	7.46
Type3-6	544	500	8.77	728	600	21.26	1075	900	19.40
Type3-7	544	600	-9.36	728	700	3.94	1075	1000	7.46
Type3-8	544	500	8.77	728	800	-9.06	1075	1100	-2.31
Type3-9	544	600	-9.36	728	700	4.00	1075	1000	7.46
Type3-10	537	600	-10.55	744	700	6.24	1084	1000	8.45
Type3-11	537	600	-10.55	744	700	6.24	1084	1000	8.45
Type3-12	537	500	7.34	752	800	-5.98	1084	1100	-1.41
Type3-13	537	500	7.34	763	600	27.12	1084	900	20.50
Type3-14	537	600	-10.55	763	700	8.96	1084	1000	8.45
Type3-15	554	500	10.74	686	700	-1.98	1043	1100	-5.21
Type3-16	554	500	10.74	686	700	-1.98	1043	1100	-5.21
Type3-17	545	500	8.96	707	700	0.95	1055	1100	-4.09
Type3-18	545	600	-9.20	707	700	1.00	1055	1000	5.50
Type3-19	545	600	-9.20	707	700	1.00	1055	1000	5.50
Type3-20	545	600	-9.20	707	700	1.06	1055	1000	5.50
Type3-21	538	500	7.53	723	700	3.30	1065	1100	-3.19
Type3-22	538	500	7.53	723	700	3.30	1065	1100	-3.19
Type3-23	538	500	7.53	732	600	21.93	1065	900	18.32
Type3-24	555	500	10.93	666	700	-4.92	1023	1000	2.31
Type3-25	555	500	10.93	666	700	-4.92	1023	1100	-6.99
Type3-26	555	600	-7.56	656	600	9.29	1023	1000	2.31
Type3-27	555	600	-7.56	643	600	7.24	1023	800	27.89
Type3-28	555	500	10.93	643	700	-8.08	1023	1000	2.31
Type3-29	546	500	9.14	686	600	14.35	1035	900	15.05
Type3-30	546	500	9.14	686	700	-1.99	1035	1100	-5.87
Type3-31	546	500	9.14	686	700	-1.94	1035	1100	-5.87
Type3-32	546	600	-9.05	686	700	-1.94	1035	1000	3.55
Type3-33	546	500	9.14	687	700	-1.88	1035	1100	-5.87
Type3-34	546	600	-9.05	687	700	-1.88	1035	1000	3.55
Type3-35	539	500	7.71	711	600	18.50	1045	900	16.15

Type3-36	539	500	7.71	722	700	3.08	1045	1100	-4.97
Type3-37	571	600	-4.81	745	600	24.09	1194	1000	19.45
Type3-38	571	600	-4.81	745	800	-6.93	1194	1200	-0.46
Type3-39	571	600	-4.81	745	800	-6.93	1194	1200	-0.46
Type3-40	571	600	-4.81	732	800	-8.47	1194	1200	-0.46
Type3-41	571	600	-4.81	732	700	4.61	1194	1200	-0.46
Type3-42	572	600	-4.73	756	800	-5.50	1167	1200	-2.77
Type3-43	572	600	-4.73	756	800	-5.46	1167	1200	-2.77
Type3-44	572	600	-4.73	756	800	-5.46	1167	1200	-2.77
Type3-45	572	600	-4.73	757	700	8.11	1167	1100	6.07
Type3-46	572	600	-4.67	757	800	-5.34	1145	1200	-4.61
Type3-47	572	600	-4.67	766	700	9.40	1145	1100	4.06
Type3-48	572	600	-4.67	766	800	-4.28	1145	1200	-4.61
Type3-49	549	400	37.36	712	600	18.62	1175	1000	17.49
Type3-50	550	400	37.48	735	600	22.57	1147	800	43.41
Type3-51	550	500	9.99	735	600	22.57	1147	900	27.47
Type3-52	550	500	9.99	736	600	22.63	1147	900	27.47
Type3-53	550	500	9.99	736	600	22.70	1147	900	27.47
Type3-54	550	500	10.06	737	500	47.35	1125	700	60.73
Type3-55	550	500	10.06	756	600	25.97	1125	900	25.01
Type3-56	528	500	5.56	713	700	1.89	1155	1000	15.54
Type3-57	528	500	5.56	691	700	-1.26	1155	1200	-3.72
Type3-58	528	700	-24.60	691	600	15.19	1155	1100	5.03
Type3-59	528	500	5.56	691	700	-1.26	1155	1200	-3.72
Type3-60	528	600	-11.96	715	700	2.12	1128	1100	2.52
Type3-61	528	600	-11.96	715	700	2.17	1128	1100	2.52
Type3-62	528	600	-11.96	716	700	2.23	1128	1100	2.52
Type3-63	528	600	-11.96	716	700	2.23	1128	1100	2.52
Type3-64	529	500	5.73	716	600	19.36	1106	1000	10.56
Type3-65	599	600	-0.22	816	700	16.59	1393	1200	16.07
Type3-66	613	600	2.21	800	800	-0.06	1305	1200	8.77
Type3-67	613	600	2.21	800	800	-0.01	1305	1200	8.77
Type3-68	625	600	4.16	778	800	-2.78	1235	1200	2.92
Type3-69	625	600	4.16	786	800	-1.72	1235	1200	2.92
Type3-70	625	600	4.16	786	800	-1.72	1235	1200	2.92
Type3-71	543	600	-9.49	796	700	13.65	1373	1200	14.44
Type3-72	543	500	8.62	796	900	-11.60	1373	1500	-8.44
Type3-73	543	500	8.62	783	800	-2.09	1373	1200	14.44
Type3-74	543	600	-9.49	783	700	11.90	1373	1200	14.44
Type3-75	543	500	8.62	783	800	-2.09	1373	1500	-8.44
Type3-76	543	500	8.62	783	900	-12.97	1373	1500	-8.44
Type3-77	558	500	11.54	779	900	-13.49	1286	1500	-14.29
Type3-78	558	600	-7.05	779	800	-2.67	1286	1400	-8.17
Type3-79	558	500	11.54	779	900	-13.45	1286	1500	-14.29
Type3-80	558	500	11.54	779	900	-13.45	1286	1500	-14.29

Type3-81	558	500	11.54	779	900	-13.40	1286	1200	7.14
Type3-82	558	600	-7.05	779	800	-2.58	1286	1400	-8.17
Type3-83	558	500	11.54	779	900	-13.40	1286	1500	-14.29
Type3-84	488	500	-2.50	775	800	-3.12	1354	1200	12.81
Type3-85	488	500	-2.50	763	700	8.96	1354	1200	12.81
Type3-86	502	500	0.42	758	800	-5.20	1266	1200	5.51
Type3-87	514	500	2.76	745	700	6.44	1196	1100	8.72
Type3-88	514	500	2.76	756	800	-5.54	1196	1200	-0.34
Type3-89	514	500	2.76	756	800	-5.54	1196	1200	-0.34
Type3-90	645	600	7.42	945	900	5.03	1724	1500	14.90
Type3-91	645	700	-7.92	945	800	18.16	1724	1500	14.90
Type3-92	645	1200	-46.29	923	800	15.39	1724	1500	14.90
Type3-93	683	650	5.03	872	900	-3.12	1536	1500	2.39
Type3-94	683	1200	-43.11	872	800	8.99	1536	1500	2.39
Type3-95	713	650	9.72	831	900	-7.67	1386	1500	-7.63
Type3-96	713	1200	-40.57	831	800	3.87	1386	1500	-7.63
Type3-97	532	600	-11.26	925	1000	-7.53	1704	1500	13.60
Type3-98	571	600	-4.90	851	900	-5.41	1516	1500	1.08
Type3-99	601	600	0.18	791	900	-12.08	1366	1500	-8.93
Type3-100	420	600	-29.94	904	900	0.46	1684	1500	12.30
Type3-101	420	600	-29.94	882	900	-2.00	1684	1500	12.30
Type3-102	458	600	-23.58	830	1000	-16.96	1497	1500	-0.22
Type3-103	489	600	-18.50	790	1000	-21.02	1347	1500	-10.23

Table E.4: Estimated and target SEG for building type 4

	Beam	width /r	nm	Beam	depth /r	nm	Colum	n width	/mm
	Regressio	Targe	Error/	Regressio	Targe	Error/	Regressio	Targe	Error/
Building	n	t	%	n	t	%	n	t	%
Type4-1	546	400	36.53	639	600	6.46	903	800	12.89
Type4-2	546	400	36.53	639	600	6.46	903	800	12.89
Type4-3	548	600	-8.58	640	600	6.67	903	900	0.34
Type4-4	549	600	-8.42	662	600	10.38	903	900	0.34
Type4-5	552	400	37.97	673	700	-3.84	903	800	12.89
Type4-6	552	600	-8.02	673	600	12.19	903	900	0.34
Type4-7	552	600	-8.02	673	700	-3.84	903	900	0.34
Type4-8	555	600	-7.53	687	700	-1.89	903	900	0.34
Type4-9	552	600	-7.97	681	600	13.51	903	900	0.34
Type4-10	552	600	-7.97	681	600	13.51	903	900	0.34
Type4-11	555	600	-7.57	700	600	16.61	903	900	0.34
Type4-12	558	400	39.39	723	600	20.49	903	800	12.89
Type4-13	558	600	-7.08	723	700	3.28	903	900	0.34
Type4-14	517	500	3.48	645	700	-7.84	909	900	0.97
Type4-15	517	500	3.48	645	700	-7.84	909	900	0.97
Type4-16	521	500	4.15	656	700	-6.30	909	900	0.97
Type4-17	523	600	-12.81	667	600	11.13	909	900	0.97

Type4-18	523	600	-12.81	667	600	11.13	909	900	0.97
Type4-19	526	600	-12.32	680	700	-2.80	909	900	0.97
Type4-20	523	500	4.69	665	700	-5.07	909	900	0.97
Type4-21	523	600	-12.76	665	600	10.75	909	900	0.97
Type4-22	526	400	31.46	683	600	13.86	909	800	13.59
Type4-23	489	500	-2.27	652	600	8.58	914	900	1.59
Type4-24	489	500	-2.27	652	700	-6.93	914	900	1.59
Type4-25	491	500	-1.79	653	700	-6.76	914	900	1.59
Type4-26	494	300	64.67	654	700	-6.54	914	800	14.29
Type4-27	494	500	-1.20	654	600	9.04	914	900	1.59
Type4-28	492	400	23.00	650	600	8.26	914	800	14.29
Type4-29	492	500	-1.60	650	600	8.26	914	900	1.59
Type4-30	494	500	-1.12	660	700	-5.65	914	900	1.59
Type4-31	494	500	-1.12	660	700	-5.65	914	900	1.59
Type4-32	497	500	-0.53	674	700	-3.71	914	900	1.59
Type4-33	497	500	-0.53	674	700	-3.71	914	900	1.59
Type4-34	497	400	24.27	667	600	11.10	914	800	14.29
Type4-35	500	500	0.01	690	700	-1.44	914	900	1.59
Type4-36	532	600	-11.30	709	700	1.27	1075	1100	-2.25
Type4-37	522	400	30.38	721	700	3.01	1075	900	19.47
Type4-38	522	500	4.31	721	700	3.01	1075	1200	-10.40
Type4-39	522	500	4.31	721	800	-9.87	1075	1400	-23.20
Type4-40	508	500	1.65	736	700	5.18	1075	1200	-10.40
Type4-41	508	500	1.65	736	700	5.18	1075	1100	-2.25
Type4-42	522	500	4.46	732	700	4.63	1075	1100	-2.25
Type4-43	522	600	-12.95	732	700	4.63	1075	1100	-2.25
Type4-44	522	500	4.46	732	900	-18.62	1075	1300	-17.29
Type4-45	498	500	-0.32	782	800	-2.31	1075	1100	-2.25
Type4-46	498	500	-0.32	782	800	-2.31	1075	1100	-2.25
Type4-47	498	500	-0.32	782	900	-13.16	1075	1300	-17.29
Type4-48	504	500	0.76	781	900	-13.25	1075	1300	-17.29
Type4-49	490	600	-18.25	818	700	16.82	1075	1100	-2.25
Type4-50	490	600	-18.25	818	800	2.22	1075	1300	-17.29
Type4-51	537	400	34.18	699	700	-0.09	1036	900	15.08
Type4-52	527	400	31.72	710	700	1.45	1036	900	15.08
Type4-53	519	400	29.75	719	700	2.68	1036	900	15.08
Type4-54	531	400	32.86	688	700	-1.73	996	900	10.68
Type4-55	500	500	-0.08	753	600	25.48	996	800	24.52
Type4-56	511	600	-14.79	814	800	1.76	1333	1300	2.57
Type4-57	511	700	-26.96	814	900	-9.55	1333	1500	-11.10
Type4-58	481	400	20.27	843	800	5.34	1333	1100	21.22
Type4-59	481	300	60.36	843	900	-6.37	1333	1300	2.57
Type4-60	443	500	-11.33	878	800	9.80	1333	1400	-4.75
Type4-61	482	400	20.39	838	800	4.70	1333	1100	21.22
Type4-62	482	600	-19.74	838	800	4.70	1333	1300	2.57

Type4-63	451	300	50.47	876	1000	-12.42	1333	1200	11.12
Type4-64	458	400	14.46	856	800	7.04	1333	1100	21.22
Type4-65	428	300	42.55	902	1000	-9.76	1333	1300	2.57
Type4-66	428	600	-28.72	902	800	12.80	1333	1300	2.57
Type4-67	428	600	-28.72	902	800	12.80	1333	1300	2.57
Type4-68	428	500	-14.47	902	900	0.26	1333	1400	-4.75
Type4-69	428	700	-38.91	902	900	0.26	1333	1500	-11.10
Type4-70	552	700	-21.09	812	800	1.47	1119	1000	11.88
Type4-71	552	700	-21.09	812	800	1.47	1119	1000	11.88
Type4-72	552	700	-21.09	812	800	1.47	1119	1200	-6.76
Type4-73	552	700	-21.09	812	800	1.47	1119	1200	-6.76
Type4-74	591	700	-15.64	745	800	-6.82	1119	1000	11.88
Type4-75	591	700	-15.64	745	800	-6.82	1119	1200	-6.76
Type4-76	591	700	-15.64	745	800	-6.82	1119	1200	-6.76
Type4-77	560	700	-19.95	784	800	-2.03	1119	1200	-6.76
Type4-78	523	700	-25.33	832	800	3.95	1119	1200	-6.76
Type4-79	523	700	-25.33	832	800	3.95	1119	1200	-6.76
Type4-80	523	700	-25.33	832	800	3.95	1119	1200	-6.76
Type4-81	567	700	-19.03	744	800	-7.01	1119	1000	11.88
Type4-82	567	700	-19.03	744	800	-7.01	1119	1200	-6.76
Type4-83	499	700	-28.73	847	800	5.93	1119	1200	-6.76
Type4-84	476	300	58.80	989	1300	-23.89	1764	1500	17.59
Type4-85	335	500	-32.95	1115	900	23.93	1764	1400	25.98
Type4-86	273	300	-9.16	1161	1300	-10.72	1764	1500	17.59
Type4-87	363	400	-9.13	1032	1100	-6.21	1764	1500	17.59
Type4-88	363	400	-9.13	1032	1200	-14.03	1764	1500	17.59
Type4-89	301	300	0.25	1105	1300	-15.00	1764	1500	17.59
Type4-90	301	400	-24.82	1105	1100	0.46	1764	1500	17.59
Type4-91	551	800	-31.08	972	900	8.04	1544	1300	18.74
Type4-92	489	800	-38.92	993	900	10.31	1544	1300	18.74
Type4-93	410	800	-48.72	1075	900	19.43	1544	1300	18.74
Type4-94	752	900	-16.46	843	1000	-15.67	1323	1300	1.79
Type4-95	752	900	-16.46	843	1000	-15.67	1323	1400	-5.48
Type4-96	689	900	-23.43	899	1000	-10.07	1323	1400	-5.48
Type4-97	639	900	-29.01	840	1000	-16.02	1323	1300	1.79
Type4-98	576	900	-35.98	913	1000	-8.68	1323	1300	1.79

Table E.5: Estimated and target SEG for building type 5

	Beam width /mm			Beam depth /mm			Column width /mm		
	Regressio	Targe	Error/	Regressio	Targe	Error/	Regressio	Targe	Error/
Building	n	t	%	n	t	%	n	t	%
Type5-1	459	400	14.65	626	550	13.85	918	750	22.37
Type5-2	432	500	-13.60	565	550	2.65	771	800	-3.66
Type5-3	433	400	8.28	581	600	-3.23	773	700	10.48
Type5-4	433	400	8.28	581	600	-3.23	773	750	3.11

Type5-5	423	400	5.79	587	600	-2.15	770	750	2.67
Type5-6	448	350	28.11	584	600	-2.64	780	750	4.03
Type5-7	440	350	25.83	589	600	-1.77	766	750	2.12
Type5-8	440	500	-11.92	589	600	-1.77	766	800	-4.26
Type5-9	430	450	-4.34	596	600	-0.69	748	800	-6.50
Type5-10	598	400	49.58	721	700	3.03	1192	900	32.42
Type5-11	598	500	19.66	721	800	-9.85	1192	1200	-0.68
Type5-12	598	600	-0.28	721	700	3.03	1192	1200	-0.68
Type5-13	598	600	-0.28	721	800	-9.85	1192	1200	-0.68
Type5-14	598	700	-14.53	721	700	3.03	1192	1200	-0.68
Type5-15	598	700	-14.53	721	700	3.03	1192	1200	-0.68
Type5-16	598	600	-0.28	721	800	-9.85	1192	1200	-0.68
Type5-17	598	700	-14.53	721	700	3.03	1192	1200	-0.68
Type5-18	598	700	-14.53	721	700	3.03	1192	1200	-0.68
Type5-19	601	700	-14.14	726	600	21.07	1204	1100	9.42
Type5-20	601	600	0.17	726	700	3.77	1204	1200	0.30
Type5-21	601	800	-24.87	726	600	21.07	1204	1200	0.30
Type5-22	601	700	-14.14	726	700	3.77	1204	1200	0.30
Type5-23	601	800	-24.87	726	600	21.07	1204	1200	0.30
Type5-24	601	500	20.20	726	700	3.77	1204	1200	0.30
Type5-25	601	700	-14.14	726	700	3.77	1204	1200	0.30
Type5-26	601	700	-14.14	726	700	3.77	1204	1200	0.30
Type5-27	601	500	20.20	726	700	3.77	1204	1100	9.42
Type5-28	601	700	-14.14	726	700	3.77	1204	1200	0.30
Type5-29	601	700	-14.14	726	700	3.77	1204	1200	0.30
Type5-30	604	400	51.10	733	600	22.15	1218	900	35.39
Type5-31	604	400	51.10	733	700	4.70	1218	1100	10.77
Type5-32	604	700	-13.66	733	600	22.15	1218	1100	10.77
Type5-33	604	700	-13.66	733	700	4.70	1218	1200	1.54
Type5-34	604	500	20.88	733	700	4.70	1218	1100	10.77
Type5-35	604	500	20.88	733	700	4.70	1218	1200	1.54
Type5-36	604	500	20.88	733	700	4.70	1218	1200	1.54
Type5-37	604	700	-13.66	733	700	4.70	1218	1200	1.54
Type5-38	604	700	-13.66	733	700	4.70	1218	1200	1.54
Type5-39	604	700	-13.66	733	700	4.70	1218	1200	1.54
Type5-40	589	500	17.80	755	700	7.79	1197	1100	8.82
Type5-41	589	500	17.80	755	700	7.79	1197	1100	8.82
Type5-42	589	600	-1.83	755	700	7.79	1197	1100	8.82
Type5-43	589	500	17.80	755	700	7.79	1197	1100	8.82
Type5-44	589	600	-1.83	755	800	-5.68	1197	1200	-0.25
Type5-45	589	500	17.80	755	700	7.79	1197	1100	8.82
Type5-46	589	800	-26.37	755	700	7.79	1197	1200	-0.25
Type5-47	589	500	17.80	755	800	-5.68	1197	1100	8.82
Type5-48	592	400	47.93	760	700	8.53	1194	900	32.71
Type5-49	592	600	-1.38	760	800	-5.03	1194	1200	-0.47

Type5-50	592	600	-1.38	760	700	8.53	1194	1000	19.44
Type5-51	592	600	-1.38	760	800	-5.03	1194	1200	-0.47
Type5-52	592	600	-1.38	760	700	8.53	1194	1100	8.58
Type5-53	592	600	-1.38	760	800	-5.03	1194	1200	-0.47
Type5-54	592	600	-1.38	760	900	-15.59	1194	1200	-0.47
Type5-55	592	800	-26.04	760	700	8.53	1194	1200	-0.47
Type5-56	495	300	65.00	766	900	-14.86	1191	1000	19.10
Type5-57	595	500	19.02	766	800	-4.22	1191	1100	8.28
Type5-58	595	800	-25.61	766	700	9.46	1191	1200	-0.75
Type5-59	595	600	-0.82	766	800	-4.22	1191	1200	-0.75
Type5-60	595	800	-25.61	766	700	9.46	1191	1200	-0.75
Type5-61	595	500	19.02	766	800	-4.22	1191	1100	8.28
Type5-62	595	600	-0.82	766	800	-4.22	1191	1200	-0.75
Type5-63	582	500	16.31	781	700	11.60	1201	1100	9.21
Type5-64	582	500	16.31	781	700	11.60	1201	1000	20.13
Type5-65	582	500	16.31	781	900	-13.20	1201	1200	0.11
Type5-66	582	600	-3.07	781	800	-2.35	1201	1200	0.11
Type5-67	582	600	-3.07	781	800	-2.35	1201	1200	0.11
Type5-68	582	500	16.31	781	700	11.60	1201	1100	9.21
Type5-69	582	700	-16.92	781	600	30.20	1201	1000	20.13
Type5-70	582	500	16.31	781	700	11.60	1201	1100	9.21
Type5-71	582	600	-3.07	781	800	-2.35	1201	1200	0.11
Type5-72	582	700	-16.92	781	700	11.60	1201	1200	0.11
Type5-73	582	600	-3.07	781	700	11.60	1201	1100	9.21
Type5-74	582	800	-27.30	781	700	11.60	1201	1200	0.11
Type5-75	582	500	16.31	781	700	11.60	1201	1100	9.21
Type5-76	582	600	-3.07	781	700	11.60	1201	1100	9.21
Type5-77	582	500	16.31	781	800	-2.35	1201	1100	9.21
Type5-78	582	800	-27.30	781	700	11.60	1201	1200	0.11
Type5-79	584	500	16.85	786	700	12.34	1187	1100	7.91
Type5-80	584	700	-16.53	786	700	12.34	1187	1200	-1.09
Type5-81	584	600	-2.62	786	800	-1.70	1187	1200	-1.09
Type5-82	584	600	-2.62	786	700	12.34	1187	1100	7.91
Type5-83	584	600	-2.62	786	800	-1.70	1187	1200	-1.09
Type5-84	584	700	-16.53	786	700	12.34	1187	1200	-1.09
Type5-85	584	800	-26.97	786	700	12.34	1187	1200	-1.09
Type5-86	584	700	-16.53	786	700	12.34	1187	1200	-1.09
Type5-87	584	600	-2.62	786	700	12.34	1187	1100	7.91
Type5-88	584	700	-16.53	786	700	12.34	1187	1200	-1.09
Type5-89	584	500	16.85	786	800	-1.70	1187	1100	7.91
Type5-90	584	600	-2.62	786	800	-1.70	1187	1200	-1.09
Type5-91	584	800	-26.97	786	700	12.34	1187	1200	-1.09
Type5-92	584	600	-2.62	786	800	-1.70	1187	1200	-1.09
Type5-93	588	500	17.53	793	700	13.27	1169	1100	6.28
Type5-94	588	500	17.53	793	800	-0.89	1169	1200	-2.58

Type5-95	588	700	-16.05	793	600	32.15	1169	1000	16.91
Type5-96	588	600	-2.06	793	800	-0.89	1169	1200	-2.58
Type5-97	588	600	-2.06	793	800	-0.89	1169	1200	-2.58
Type5-98	588	700	-16.05	793	700	13.27	1169	1200	-2.58
Type5-99	528	600	-12.01	660	600	9.93	1045	1000	4.48
Type5-100	528	400	31.98	660	700	-5.77	1045	1000	4.48
Type5-101	528	600	-12.01	660	700	-5.77	1045	1200	-12.94
Type5-102	528	500	5.58	660	700	-5.77	1045	1100	-5.02
Type5-103	528	600	-12.01	660	700	-5.77	1045	1200	-12.94
Type5-104	528	600	-12.01	660	700	-5.77	1045	1200	-12.94
Type5-105	525	500	5.06	665	600	10.80	1057	1000	5.66
Type5-106	525	500	5.06	665	700	-5.03	1057	1100	-3.94
Type5-107	525	600	-12.45	665	700	-5.03	1057	1200	-11.95
Type5-108	525	600	-12.45	665	700	-5.03	1057	1200	-11.95
Type5-109	525	600	-12.45	665	600	10.80	1057	1000	5.66
Type5-110	522	400	30.50	671	600	11.88	1071	900	19.05
Type5-111	522	600	-13.00	671	600	11.88	1071	1000	7.15
Type5-112	522	500	4.40	671	700	-4.11	1071	1100	-2.59
Type5-113	522	400	30.50	671	700	-4.11	1071	1000	7.15
Type5-114	522	600	-13.00	671	600	11.88	1071	1100	-2.59
Type5-115	522	600	-13.00	671	700	-4.11	1071	1200	-10.71
Type5-116	522	600	-13.00	671	700	-4.11	1071	1200	-10.71
Type5-117	522	600	-13.00	671	700	-4.11	1071	1200	-10.71
Type5-118	522	600	-13.00	671	700	-4.11	1071	1200	-10.71
Type5-119	522	600	-13.00	671	700	-4.11	1071	1200	-10.71
Type5-120	522	600	-13.00	671	700	-4.11	1071	1200	-10.71
Type5-121	528	400	31.95	682	800	-14.79	1050	1000	5.00
Type5-122	528	500	5.56	682	800	-14.79	1050	1200	-12.50
Type5-123	528	500	5.56	682	700	-2.61	1050	1100	-4.54
Type5-124	528	600	-12.03	682	700	-2.61	1050	1200	-12.50
Type5-125	528	500	5.56	682	700	-2.61	1050	1100	-4.54
Type5-126	528	600	-12.03	682	800	-14.79	1050	1200	-12.50
Type5-127	528	600	-12.03	682	700	-2.61	1050	1200	-12.50
Type5-128	528	600	-12.03	682	700	-2.61	1050	1200	-12.50
Type5-129	528	600	-12.03	682	800	-14.79	1050	1200	-12.50
Type5-130	528	500	5.56	682	700	-2.61	1050	1100	-4.54
Type5-131	528	600	-12.03	682	800	-14.79	1050	1200	-12.50
Type5-132	528	600	-12.03	682	800	-14.79	1050	1200	-12.50
Type5-133	528	600	-12.03	682	800	-14.79	1050	1200	-12.50
Type5-134	525	400	31.30	687	700	-1.87	1047	900	16.37
Type5-135	525	500	5.04	687	700	-1.87	1047	1100	-4.79
Type5-136	525	500	5.04	687	700	-1.87	1047	1100	-4.79
Type5-137	525	400	31.30	687	800	-14.14	1047	1000	4.74
Type5-138	525	500	5.04	687	900	-23.68	1047	1200	-12.72
Type5-139	525	600	-12.47	687	800	-14.14	1047	1200	-12.72

Type5-140	525	500	5.04	687	900	-23.68	1047	1200	-12.72
Type5-141	525	600	-12.47	687	800	-14.14	1047	1200	-12.72
Type5-142	525	700	-24.97	687	700	-1.87	1047	1100	-4.79
Type5-143	525	600	-12.47	687	800	-14.14	1047	1200	-12.72
Type5-144	525	600	-12.47	687	800	-14.14	1047	1200	-12.72
Type5-145	525	600	-12.47	687	800	-14.14	1047	1200	-12.72
Type5-146	522	400	30.47	693	900	-22.96	1044	1200	-13.00
Type5-147	522	500	4.38	693	700	-0.95	1044	1100	-5.09
Type5-148	522	400	30.47	693	800	-13.33	1044	1000	4.40
Type5-149	522	500	4.38	693	700	-0.95	1044	1000	4.40
Type5-150	522	600	-13.02	693	800	-13.33	1044	1200	-13.00
Type5-151	522	400	30.47	693	900	-22.96	1044	1200	-13.00
Type5-152	522	500	4.38	693	900	-22.96	1044	1200	-13.00
Type5-153	522	600	-13.02	693	800	-13.33	1044	1200	-13.00
Type5-154	522	400	30.47	693	900	-22.96	1044	1200	-13.00
Type5-155	528	500	5.55	699	700	-0.09	1054	1100	-4.16
Type5-156	528	400	31.93	699	800	-12.58	1054	1000	5.42
Type5-157	528	600	-12.04	699	700	-0.09	1054	1100	-4.16
Type5-158	528	500	5.55	699	700	-0.09	1054	1100	-4.16
Type5-159	528	600	-12.04	699	800	-12.58	1054	1200	-12.15
Type5-160	528	500	5.55	699	700	-0.09	1054	1100	-4.16
Type5-161	528	600	-12.04	699	800	-12.58	1054	1200	-12.15
Type5-162	528	500	5.55	699	700	-0.09	1054	1100	-4.16
Type5-163	528	500	5.55	699	700	-0.09	1054	1100	-4.16
Type5-164	528	400	31.93	699	900	-22.29	1054	1200	-12.15
Type5-165	528	600	-12.04	699	700	-0.09	1054	1200	-12.15
Type5-166	528	500	5.55	699	700	-0.09	1054	1100	-4.16
Type5-167	528	500	5.55	699	700	-0.09	1054	1100	-4.16
Type5-168	528	600	-12.04	699	700	-0.09	1054	1200	-12.15
Type5-169	528	600	-12.04	699	800	-12.58	1054	1200	-12.15
Type5-170	475	300	58.33	705	800	-11.93	1040	1000	3.99
Type5-171	475	300	58.33	705	800	-11.93	1040	1000	3.99
Type5-172	525	500	5.02	705	700	0.65	1040	1000	3.99
Type5-173	525	500	5.02	705	700	0.65	1040	1100	-5.46
Type5-174	525	600	-12.48	705	700	0.65	1040	1200	-13.34
Type5-175	525	600	-12.48	705	800	-11.93	1040	1200	-13.34
Type5-176	525	600	-12.48	705	700	0.65	1040	1200	-13.34
Type5-177	525	600	-12.48	705	700	0.65	1040	1200	-13.34
Type5-178	525	500	5.02	705	700	0.65	1040	1100	-5.46
Type5-179	525	600	-12.48	705	700	0.65	1040	1200	-13.34
Type5-180	525	600	-12.48	705	700	0.65	1040	1200	-13.34
Type5-181	525	600	-12.48	705	800	-11.93	1040	1200	-13.34
Type5-182	525	500	5.02	705	700	0.65	1040	1100	-5.46
Type5-183	458	400	14.38	598	600	-0.34	898	800	12.22
Type5-184	458	400	14.38	598	600	-0.34	898	1000	-10.23

Type5-185	458	400	14.38	598	600	-0.34	898	800	12.22
Type5-186	458	400	14.38	598	600	-0.34	898	1000	-10.23
Type5-187	458	400	14.38	598	600	-0.34	898	800	12.22
Type5-188	458	500	-8.50	598	600	-0.34	898	900	-0.25
Type5-189	458	400	14.38	598	600	-0.34	898	1000	-10.23
Type5-190	458	600	-23.75	598	500	19.59	898	800	12.22
Type5-191	458	400	14.38	598	600	-0.34	898	800	12.22
Type5-192	458	500	-8.50	598	600	-0.34	898	900	-0.25
Type5-193	450	400	12.39	603	600	0.53	910	800	13.70
Type5-194	450	400	12.39	603	500	20.63	910	700	29.94
Type5-195	450	500	-10.09	603	500	20.63	910	800	13.70
Type5-196	450	500	-10.09	603	500	20.63	910	700	29.94
Type5-197	450	400	12.39	603	600	0.53	910	1000	-9.04
Type5-198	450	400	12.39	603	600	0.53	910	800	13.70
Type5-199	450	400	12.39	603	600	0.53	910	800	13.70
Type5-200	450	400	12.39	603	600	0.53	910	1000	-9.04
Type5-201	450	400	12.39	603	600	0.53	910	1000	-9.04
Type5-202	440	400	9.90	610	600	1.61	924	800	15.55
Type5-203	440	400	9.90	610	500	21.93	924	700	32.06
Type5-204	440	500	-12.08	610	500	21.93	924	800	15.55
Type5-205	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-206	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-207	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-208	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-209	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-210	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-211	440	500	-12.08	610	600	1.61	924	900	2.71
Type5-212	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-213	440	400	9.90	610	600	1.61	924	1000	-7.56
Type5-214	467	400	16.65	609	500	21.77	903	600	50.50
Type5-215	467	300	55.54	609	700	-13.02	903	800	12.87
Type5-216	467	300	55.54	609	700	-13.02	903	800	12.87
Type5-217	467	500	-6.68	609	600	1.48	903	900	0.33
Type5-218	467	500	-6.68	609	600	1.48	903	900	0.33
Type5-219	467	400	16.65	609	600	1.48	903	800	12.87
Type5-220	467	500	-6.68	609	600	1.48	903	900	0.33
Type5-221	467	500	-6.68	609	600	1.48	903	900	0.33
Type5-222	459	400	14.66	614	600	2.34	900	800	12.54
Type5-223	459	500	-8.27	614	600	2.34	900	800	12.54
Type5-224	459	500	-8.27	614	600	2.34	900	800	12.54
Type5-225	459	400	14.66	614	700	-12.28	900	900	0.04
Type5-226	459	400	14.66	614	700	-12.28	900	900	0.04
Type5-227	459	600	-23.56	614	500	22.81	900	700	28.62
Type5-228	459	500	-8.27	614	600	2.34	900	900	0.04
Type5-229	459	400	14.66	614	600	2.34	900	800	12.54

Type5-230	459	400	14.66	614	700	-12.28	900	1000	-9.97
Type5-231	459	400	14.66	614	700	-12.28	900	1000	-9.97
Type5-232	459	400	14.66	614	700	-12.28	900	1000	-9.97
Type5-233	449	400	12.17	621	600	3.42	897	800	12.12
Type5-234	449	400	12.17	621	600	3.42	897	800	12.12
Type5-235	449	600	-25.22	621	500	24.11	897	700	28.14
Type5-236	449	400	12.17	621	700	-11.35	897	900	-0.34
Type5-237	449	600	-25.22	621	500	24.11	897	700	28.14
Type5-238	449	400	12.17	621	700	-11.35	897	800	12.12
Type5-239	449	400	12.17	621	800	-22.43	897	1000	-10.30
Type5-240	449	400	12.17	621	700	-11.35	897	1000	-10.30
Type5-241	449	400	12.17	621	600	3.42	897	800	12.12
Type5-242	449	400	12.17	621	700	-11.35	897	800	12.12
Type5-243	449	400	12.17	621	700	-11.35	897	1000	-10.30
Type5-244	449	400	12.17	621	700	-11.35	897	1000	-10.30
Type5-245	449	600	-25.22	621	500	24.11	897	700	28.14
Type5-246	449	400	12.17	621	700	-11.35	897	1000	-10.30
Type5-247	474	400	18.48	618	600	2.93	907	800	13.40
Type5-248	474	300	57.97	618	700	-11.77	907	800	13.40
Type5-249	474	400	18.48	618	600	2.93	907	900	0.80
Type5-250	474	600	-21.02	618	500	23.52	907	800	13.40
Type5-251	474	500	-5.22	618	600	2.93	907	900	0.80
Type5-252	474	400	18.48	618	600	2.93	907	800	13.40
Type5-253	474	400	18.48	618	600	2.93	907	800	13.40
Type5-254	474	500	-5.22	618	600	2.93	907	900	0.80
Type5-255	474	400	18.48	618	600	2.93	907	800	13.40
Type5-256	474	500	-5.22	618	600	2.93	907	900	0.80
Type5-257	474	500	-5.22	618	600	2.93	907	900	0.80
Type5-258	474	400	18.48	618	600	2.93	907	800	13.40
Type5-259	474	500	-5.22	618	600	2.93	907	900	0.80
Type5-260	466	400	16.49	623	600	3.79	893	800	11.61
Type5-261	466	300	55.31	623	700	-11.03	893	800	11.61
Type5-262	466	500	-6.81	623	500	24.55	893	700	27.56
Type5-263	466	400	16.49	623	600	3.79	893	800	11.61
Type5-264	466	600	-22.34	623	500	24.55	893	800	11.61
Type5-265	466	600	-22.34	623	500	24.55	893	800	11.61
Type5-266	466	400	16.49	623	600	3.79	893	800	11.61
Type5-267	466	400	16.49	623	600	3.79	893	800	11.61
Type5-268	466	400	16.49	623	600	3.79	893	800	11.61
Type5-269	466	400	16.49	623	600	3.79	893	800	11.61
Type5-270	466	500	-6.81	623	600	3.79	893	900	-0.79
Type5-271	466	500	-6.81	623	600	3.79	893	900	-0.79
Type5-272	466	500	-6.81	623	600	3.79	893	900	-0.79
Type5-273	456	400	14.00	629	600	4.88	875	800	9.38
Type5-274	456	500	-8.80	629	500	25.85	875	700	25.00

Type5-275	456	500	-8.80	629	600	4.88	875	900	-2.77
Type5-276	456	600	-24.00	629	500	25.85	875	800	9.38
Type5-277	456	500	-8.80	629	600	4.88	875	900	-2.77
Type5-277	456	400	14.00	629	600	4.88	875 875	800	9.38
Type5-278 Type5-279	456	500	-8.80	629	600	4.88	875 875	900	-2.77
Type5-280	456	400	14.00	629	600	4.88	875	800	9.38
								800	
Type5-281	456	600 500	-24.00	629	500	25.85	875		9.38
Type5-282	456		-8.80	629	600	4.88	875	900	-2.77
Type5-283	456	500	-8.80	629	600 800	4.88	875	900	-2.77
Type5-284	668	400	67.00	771		-3.58	1382	1200	15.19
Type5-285	768	900	-14.67	771 777	700	10.19	1382	1200	15.19
Type5-286	771	800	-3.66		700	29.42	1394	1200	16.18
Type5-287	771	900	-14.37	777	700	10.93	1394	1200	16.18
Type5-288	659	400	64.75	805	800	0.58	1388	1100	26.14
Type5-289	759	800	-5.17	805	700	14.95	1388	1200	15.63
Type5-290	561	300	87.00	810	1000	-19.02	1385	1200	15.41
Type5-291	565	300	88.33	816	1000	-18.37	1382	1200	15.13
Type5-292	765	900	-15.03	816	700	16.62	1382	1200	15.13
Type5-293	751	900	-16.53	831	700	18.76	1392	1200	15.98
Type5-294	751	800	-6.10	831	700	18.76	1392	1200	15.98
Type5-295	751	900	-16.53	831	700	18.76	1392	1200	15.98
Type5-296	754	900	-16.23	836	700	19.50	1377	1200	14.79
Type5-297	757	500	51.46	843	800	5.37	1360	1100	23.60
Type5-298	757	900	-15.86	843	700	20.43	1360	1200	13.30
Type5-299	757	800	-5.34	843	700	20.43	1360	1200	13.30
Type5-300	532	300	77.33	710	800	-11.29	1235	1200	2.94
Type5-301	632	800	-21.01	710	700	1.39	1235	1200	2.94
Type5-302	632	500	26.38	710	700	1.39	1235	1200	2.94
Type5-303	632	600	5.31	710	800	-11.29	1235	1200	2.94
Type5-304	632	900	-29.79	710	600	18.28	1235	1200	2.94
Type5-305	632	600	5.31	710	700	1.39	1235	1200	2.94
Type5-306	632	600	5.31	710	800	-11.29	1235	1200	2.94
Type5-307	632	700	-9.73	710	700	1.39	1235	1200	2.94
Type5-308	632	700	-9.73	710	700	1.39	1235	1200	2.94
Type5-309	529	300	76.33	715	900	-20.57	1247	1200	3.93
Type5-310	629	500	25.85	715	800	-10.64	1247	1200	3.93
Type5-311	629	600	4.88	715	700	2.13	1247	1200	3.93
Type5-312	629	800	-21.34	715	600	19.15	1247	1200	3.93
Type5-313	532	300	77.33	732	900	-18.69	1241	1200	3.38
Type5-314	632	700	-9.74	732	700	4.54	1241	1200	3.38
Type5-315	632	800	-21.03	732	700	4.54	1241	1200	3.38
Type5-316	632	600	5.29	749	700	7.07	1245	1200	3.73
Type5-317	632	800	-21.04	749	700	7.07	1245	1200	3.73
Type5-318	632	500	26.34	749	800	-6.31	1245	1200	3.73
Type5-319	632	600	5.29	749	800	-6.31	1245	1200	3.73

Type5-320	632	600	5.29	749	700	7.07	1245	1200	3.73
Type5-321	496	500	-0.84	648	700	-7.42	1088	1100	-1.07
Type5-322	496	900	-44.91	648	600	8.01	1088	1200	-9.32
Type5-323	496	700	-29.17	648	700	-7.42	1088	1200	-9.32
Type5-324	496	600	-17.37	648	700	-7.42	1088	1200	-9.32
Type5-325	496	700	-29.17	648	700	-7.42	1088	1200	-9.32
Type5-326	488	600	-18.70	653	700	-6.68	1100	1200	-8.33
Type5-327	488	700	-30.31	653	600	8.88	1100	1200	-8.33
Type5-328	488	400	21.96	653	800	-18.34	1100	1200	-8.33
Type5-329	488	500	-2.43	653	700	-6.68	1100	1200	-8.33
Type5-330	488	700	-30.31	653	600	8.88	1100	1200	-8.33
Type5-331	488	600	-18.70	653	700	-6.68	1100	1200	-8.33
Type5-332	478	600	-20.35	660	700	-5.75	1115	1200	-7.09
Type5-333	478	700	-31.73	660	700	-5.75	1115	1200	-7.09
Type5-334	478	400	19.47	660	700	-5.75	1115	1200	-7.09
Type5-335	478	700	-31.73	660	600	9.96	1115	1200	-7.09
Type5-336	505	300	68.30	659	1000	-34.10	1093	1100	-0.59
Type5-337	505	600	-15.85	659	700	-5.86	1093	1200	-8.88
Type5-338	505	400	26.23	659	800	-17.63	1093	1200	-8.88
Type5-339	505	600	-15.85	659	700	-5.86	1093	1200	-8.88
Type5-340	505	600	-15.85	659	700	-5.86	1093	1200	-8.88
Type5-341	497	600	-17.18	664	800	-16.98	1091	1200	-9.10
Type5-342	497	500	-0.61	664	800	-16.98	1091	1200	-9.10
Type5-343	497	700	-29.01	664	700	-5.12	1091	1200	-9.10
Type5-344	497	600	-17.18	664	800	-16.98	1091	1200	-9.10
Type5-345	497	700	-29.01	664	700	-5.12	1091	1200	-9.10
Type5-346	487	600	-18.84	671	800	-16.17	1087	1200	-9.38
Type5-347	487	600	-18.84	671	800	-16.17	1087	1200	-9.38
Type5-348	487	400	21.75	671	900	-25.48	1087	1200	-9.38
Type5-349	512	600	-14.63	668	700	-4.62	1098	1200	-8.53
Type5-350	512	700	-26.83	668	700	-4.62	1098	1200	-8.53
Type5-351	512	400	28.05	668	800	-16.54	1098	1200	-8.53
Type5-352	512	600	-14.63	668	700	-4.62	1098	1200	-8.53
Type5-353	512	700	-26.83	668	700	-4.62	1098	1200	-8.53
Type5-354	512	600	-14.63	668	700	-4.62	1098	1200	-8.53
Type5-355	504	300	68.08	673	900	-25.24	1083	1200	-9.72
Type5-356	504	600	-15.96	673	700	-3.87	1083	1200	-9.72
Type5-357	504	600	-15.96	673	700	-3.87	1083	1200	-9.72
Type5-358	504	700	-27.97	673	700	-3.87	1083	1200	-9.72
Type5-359	504	600	-15.96	673	700	-3.87	1083	1200	-9.72
Type5-360	494	500	-1.15	679	800	-15.08	1066	1200	-11.21
Type5-361	494	600	-17.62	679	700	-2.95	1066	1200	-11.21
Type5-362	494	700	-29.39	679	700	-2.95	1066	1200	-11.21
Type5-363	494	600	-17.62	679	700	-2.95	1066	1200	-11.21

E.2 SEG estimates from neural network models

Table E.6: Error percentage for building type-1

		eam widt			am depth	 n /mm	Col	umn wid	th /mm
Building	NN	Target	Error/%	NN	Target	Error/%	NN	Target	Error/%
Type1-1	701	700	0.20	600	600	0.01	1000	1000	0.00
Type1-2	701	600	16.90	600	700	-14.27	1000	1000	0.00
Type1-3	745	700	6.49	600	600	0.03	1000	1000	0.00
Type1-4	673	600	12.08	684	700	-2.32	1000	1000	0.00
Type1-5	673	800	-15.94	684	600	13.95	1000	1000	0.00
Type1-6	667	600	11.11	625	700	-10.66	1000	1000	0.00
Type1-7	667	800	-16.67	625	600	4.23	1000	1000	0.00
Type1-8	636	600	6.05	675	700	-3.57	1000	1000	0.00
Type1-9	646	600	7.74	700	700	0.05	1000	1000	0.00
Type1-10	635	500	26.96	700	800	-12.52	980	1000	-2.02
Type1-11	635	600	5.80	700	700	-0.02	980	1000	-2.02
Type1-12	623	700	-10.97	599	600	-0.15	1000	1000	-0.02
Type1-13	670	700	-4.28	700	600	16.66	1000	900	11.12
Type1-14	670	700	-4.28	700	600	16.66	1000	1000	0.00
Type1-15	584	600	-2.70	699	700	-0.07	1000	1000	0.00
Type1-16	584	500	16.76	699	800	-12.56	1000	1000	0.00
Type1-17	644	500	28.74	640	800	-19.95	967	1000	-3.32
Type1-18	692	700	-1.20	659	600	9.87	900	900	0.00
Type1-19	703	700	0.40	700	700	-0.05	900	900	0.00
Type1-20	703	700	0.40	700	800	-12.54	900	900	0.00
Type1-21	692	700	-1.20	666	600	11.03	900	900	-0.02
Type1-22	682	700	-2.51	651	600	8.48	900	900	0.00
Type1-23	682	700	-2.51	651	800	-18.64	900	900	0.00
Type1-24	702	700	0.22	650	600	8.42	900	900	0.01
Type1-25	792	800	-1.05	725	700	3.57	1100	1100	0.00
Type1-26	814	800	1.72	700	700	-0.01	1100	1100	-0.01
Type1-27	797	900	-11.42	725	700	3.59	1100	1100	0.00
Type1-28	827	700	18.18	750	700	7.14	1100	1100	0.01
Type1-29	827	800	3.41	750	700	7.14	1100	1100	0.01
Type1-30	798	800	-0.25	726	700	3.65	1100	1100	0.01
Type1-31	798	800	-0.25	726	700	3.65	1100	1100	0.01
Type1-32	825	900	-8.33	720	800	-10.00	1100	1100	0.01
Type1-33	798	800	-0.21	750	700	7.14	1100	1100	0.00
Type1-34	798	800	-0.25	700	700	0.07	1100	1100	-0.01
Type1-35	798	900	-11.33	700	800	-12.44	1100	1100	-0.01
Type1-36	662	700	-5.37	740	700	5.66	1100	1100	-0.01
Type1-37	741	600	23.42	740	800	-7.50	1100	1100	0.00
Type1-38	692	600	15.32	733	800	-8.35	1100	1100	0.00
Type1-39	691	600	15.12	733	700	4.73	1100	1100	0.00

Type1-40	677	600	12.80	740	800	-7.49	1100	1100	-0.01
Type1-41	677	600	12.80	740	800	-7.49	1100	1100	-0.01
Type1-42	686	600	14.27	724	800	-9.44	1100	1100	-0.01
Type1-43	686	700	-2.06	724	700	3.49	1100	1100	-0.01
Type1-44	760	800	-5.00	700	800	-12.44	1000	1000	0.00
Type1-45	792	800	-1.00	800	800	-0.06	1000	1000	-0.01
Type1-46	805	800	0.61	599	600	-0.09	1000	1000	0.00
Type1-47	953	800	19.12	900	900	-0.04	1300	1300	-0.01
Type1-48	965	800	20.65	900	900	0.03	1300	1300	0.01
Type1-49	965	900	7.25	900	900	0.03	1300	1300	0.01
Type1-50	977	900	8.59	900	900	0.00	1300	1300	0.01
Type1-51	977	900	8.59	900	900	0.00	1300	1300	0.01
Type1-52	690	700	-1.46	800	800	-0.01	1000	1000	0.00
Type1-53	690	700	-1.46	800	800	-0.01	1000	1000	0.00
Type1-54	679	700	-3.01	800	800	-0.01	1000	1000	0.00
Type1-55	679	700	-3.01	800	800	-0.01	1000	1000	0.00
Type1-56	679	700	-3.01	800	800	-0.01	1000	1000	0.00
Type1-57	669	700	-4.38	800	800	0.03	1000	1000	0.01
Type1-58	696	700	-0.57	800	800	0.00	1000	1000	-0.01
Type1-59	946	1000	-5.43	798	800	-0.20	1200	1200	-0.01
Type1-60	429	400	7.21	975	1000	-2.51	1425	1400	1.78
Type1-61	406	400	1.55	1067	1100	-3.03	1440	1400	2.86
Type1-62	406	400	1.55	1067	1100	-3.03	1440	1400	2.86
Type1-63	404	400	1.10	1066	1100	-3.06	1440	1400	2.86
Type1-64	399	400	-0.24	1100	1000	9.98	1433	1400	2.38
Type1-65	398	400	-0.45	1080	1100	-1.82	1440	1400	2.86
Type1-66	406	400	1.49	1060	1100	-3.65	1433	1400	2.37
Type1-67	406	400	1.49	1060	1100	-3.65	1433	1400	2.37

Table E.7: Error percentage for building type 2

				<u> </u>						
	В	eam widt	h/mm	Beam depth /mm			Column width /mm			
Building	NN	Target	Error/%	NN	Target	Error/%	NN	Target	Error/%	
Type2-1	698	700	-0.27	795	800	-0.63	929	900	3.20	
Type2-2	698	700	-0.27	795	800	-0.63	929	900	3.20	
Type2-3	696	700	-0.55	802	800	0.26	928	900	3.16	
Type2-4	697	700	-0.41	796	800	-0.48	916	900	1.80	
Type2-5	697	700	-0.41	796	800	-0.48	916	1000	-8.38	
Type2-6	697	700	-0.41	796	800	-0.48	916	900	1.80	
Type2-7	697	700	-0.41	796	800	-0.48	916	900	1.80	
Type2-8	697	700	-0.49	800	800	-0.01	926	900	2.94	
Type2-9	697	700	-0.49	800	800	-0.01	926	1000	-7.35	
Type2-10	697	700	-0.49	800	800	-0.01	926	1000	-7.35	
Type2-11	696	700	-0.52	797	800	-0.37	925	900	2.76	
Type2-12	696	700	-0.52	797	800	-0.37	925	900	2.76	
Type2-13	696	700	-0.52	797	800	-0.37	925	1000	-7.51	

Type2-14	696	700	-0.52	797	800	-0.37	925	900	2.76
Type2-15	697	700	-0.48	796	800	-0.55	933	900	3.66
Type2-16	697	700	-0.48	796	800	-0.55	933	1000	-6.70
Type2-17	697	700	-0.48	796	800	-0.55	933	1000	-6.70
Type2-18	697	700	-0.43	797	800	-0.35	939	900	4.39
Type2-19	697	700	-0.43	797	800	-0.35	939	900	4.39
Type2-20	697	700	-0.43	797	800	-0.35	939	1000	-6.05
Type2-21	699	700	-0.18	797	800	-0.36	941	900	4.51
Type2-22	501	500	0.13	600	600	0.04	746	700	6.57
Type2-23	501	500	0.13	600	600	0.04	746	700	6.57
Type2-24	501	500	0.13	600	600	0.04	746	800	-6.75
Type2-25	499	500	-0.18	598	600	-0.37	728	700	4.00
Type2-26	499	500	-0.18	598	600	-0.37	728	700	4.00
Type2-27	499	500	-0.18	598	600	-0.37	728	700	4.00
Type2-28	499	500	-0.18	598	600	-0.37	728	700	4.00
Type2-29	499	500	-0.18	600	600	0.01	723	700	3.28
Type2-30	499	500	-0.18	600	600	0.01	723	700	3.28
Type2-31	499	500	-0.18	600	600	0.01	723	800	-9.63
Type2-32	499	500	-0.18	600	600	0.01	723	800	-9.63
Type2-33	499	500	-0.11	595	600	-0.84	757	700	8.21
Type2-34	500	500	-0.06	598	600	-0.37	740	700	5.64
Type2-35	499	500	-0.28	599	600	-0.22	728	700	3.98
Type2-36	499	500	-0.28	599	600	-0.22	728	700	3.98
Type2-37	499	500	-0.28	599	600	-0.22	728	800	-9.02
Type2-38	499	500	-0.28	599	600	-0.22	728	700	3.98
Type2-39	499	500	-0.28	599	600	-0.22	728	700	3.98
Type2-40	500	500	0.07	607	600	1.23	740	700	5.71
Type2-41	500	500	0.07	607	600	1.23	740	800	-7.50
Type2-42	500	500	0.07	607	600	1.23	740	800	-7.50
Type2-43	500	500	-0.02	598	600	-0.30	718	700	2.54
Type2-44	500	500	-0.02	598	600	-0.30	718	800	-10.28
Type2-45	501	500	0.11	602	600	0.34	733	700	4.78
Type2-46	501	500	0.11	602	600	0.34	733	800	-8.32
Type2-47	514	400	28.56	677	600	12.77	860	800	7.48
Type2-48	581	500	16.12	590	500	17.92	838	700	19.68
Type2-49	581	500	16.12	590	700	-15.77	838	900	-6.91
Type2-50	573	400	43.13	584	600	-2.70	856	700	22.26
Type2-51	573	500	14.51	584	500	16.77	856	700	22.26
Type2-52	556	500	11.12	611	600	1.85	839	900	-6.81
Type2-53	499	500	-0.20	686	700	-2.00	888	900	-1.28
Type2-54	526	500	5.12	684	700	-2.30	844	900	-6.17
Type2-55	539	500	7.76	643	700	-8.08	883	900	-1.88
Type2-56	539	500	7.76	643	700	-8.08	883	900	-1.88
Type2-57	539	500	7.76	643	700	-8.08	883	900	-1.88
Type2-58	524	500	4.86	648	600	7.99	870	900	-3.34

Type2-59	524	500	4.86	648	700	-7.44	870	900	-3.34
Type2-60	500	400	24.98	659	600	9.81	852	800	6.51
Type2-61	500	500	-0.01	659	600	9.81	852	900	-5.32
Type2-62	702	700	0.35	795	800	-0.57	1096	1000	9.57
Type2-63	699	700	-0.09	800	800	0.02	1062	1100	-3.49
Type2-64	699	700	-0.09	796	800	-0.46	1047	900	16.36
Type2-65	699	700	-0.09	796	800	-0.46	1047	1200	-12.73
Type2-66	699	700	-0.09	796	800	-0.46	1047	1000	4.73
Type2-67	699	700	-0.09	796	800	-0.46	1047	1100	-4.80
Type2-68	699	700	-0.09	796	800	-0.46	1047	1200	-12.73
Type2-69	700	700	0.06	798	800	-0.25	1063	1100	-3.40
Type2-70	700	700	0.06	798	800	-0.25	1063	1200	-11.45
Type2-71	699	700	-0.18	796	800	-0.50	1080	900	19.98
Type2-72	699	700	-0.18	796	800	-0.50	1080	1000	7.99
Type2-73	699	700	-0.18	796	800	-0.50	1080	1200	-10.01
Type2-74	699	700	-0.18	796	800	-0.50	1080	1200	-10.01
Type2-75	699	700	-0.18	796	800	-0.50	1080	1000	7.99
Type2-76	699	700	-0.18	796	800	-0.50	1080	1100	-1.83
Type2-77	698	700	-0.28	797	800	-0.36	1101	1100	0.08
Type2-78	698	700	-0.28	797	800	-0.36	1101	1000	10.08
Type2-79	698	700	-0.28	797	800	-0.36	1101	1000	10.08
Type2-80	698	700	-0.28	797	800	-0.36	1101	1200	-8.26
Type2-81	698	700	-0.28	797	800	-0.36	1101	1200	-8.26
Type2-82	700	700	-0.02	798	800	-0.29	1047	900	16.29
Type2-83	700	700	-0.02	798	800	-0.29	1047	1100	-4.85
Type2-84	700	700	-0.02	798	800	-0.29	1047	1200	-12.78
Type2-85	700	700	0.06	799	800	-0.15	1070	1000	7.03
Type2-86	700	700	0.06	799	800	-0.15	1070	1000	7.03
Type2-87	700	700	0.06	799	800	-0.15	1070	1000	7.03
Type2-88	700	700	0.06	799	800	-0.15	1070	1200	-10.81
Type2-89	700	700	0.06	799	800	-0.15	1070	1000	7.03
Type2-90	700	700	0.06	799	800	-0.15	1070	1200	-10.81
Type2-91	660	600	9.94	708	700	1.12	1046	900	16.26
Type2-92	660	600	9.94	708	700	1.12	1046	1100	-4.87
Type2-93	660	600	9.94	708	700	1.12	1046	1000	4.64
Type2-94	660	900	-26.71	708	800	-11.52	1046	1100	-4.87
Type2-95	653	900	-27.46	705	700	0.69	1018	1100	-7.41
Type2-96	653	600	8.81	705	700	0.69	1018	1000	1.85
Type2-97	665	600	10.83	707	700	0.95	1013	1000	1.33
Type2-98	665	800	-16.88	707	700	0.95	1013	1100	-7.88
Type2-99	665	900	-26.11	707	800	-11.67	1013	1100	-7.88
Type2-100	669	800	-16.33	702	700	0.27	1041	1100	-5.38
Type2-101	669	900	-25.62	702	800	-12.26	1041	1100	-5.38
Type2-102	717	600	19.48	706	700	0.91	1018	1000	1.84
Type2-103	717	900	-20.34	706	700	0.91	1018	1100	-7.42

Type2-104	681	600	13.55	695	700	-0.66	1043	900	15.89
Type2-105	681	600	13.55	695	700	-0.66	1043	1100	-5.18
Type2-106	645	600	7.47	699	700	-0.19	1027	1000	2.74
Type2-107	645	600	7.47	699	700	-0.19	1027	1100	-6.60
Type2-108	802	800	0.27	893	900	-0.81	1207	1200	0.60
Type2-109	800	800	-0.01	896	900	-0.42	1206	1100	9.64
Type2-110	800	800	-0.01	896	900	-0.42	1206	1200	0.50
Type2-111	801	800	0.07	897	900	-0.39	1195	1100	8.65
Type2-112	801	800	0.07	897	900	-0.39	1195	1200	-0.40
Type2-113	802	800	0.24	895	900	-0.59	1228	1200	2.36
Type2-114	801	800	0.10	896	900	-0.46	1186	1200	-1.16
Type2-115	801	800	0.10	896	900	-0.46	1186	1200	-1.16
Type2-116	797	800	-0.32	900	900	-0.01	1200	1300	-7.69
Type2-117	801	800	0.12	899	900	-0.08	1201	1200	0.12
Type2-118	801	800	0.14	898	900	-0.23	1199	1200	-0.12
Type2-119	801	800	0.14	898	900	-0.23	1199	1200	-0.12
Type2-120	801	800	0.14	898	900	-0.23	1199	1300	-7.80
Type2-121	700	700	0.06	800	800	0.02	962	900	6.88
Type2-122	700	700	0.06	800	800	0.02	962	900	6.88
Type2-123	700	700	0.06	800	800	0.02	962	900	6.88
Type2-124	700	700	0.06	800	800	0.02	962	900	6.88
Type2-125	697	700	-0.37	800	800	0.01	969	900	7.62
Type2-126	697	700	-0.37	800	800	0.01	969	1000	-3.14
Type2-127	697	700	-0.37	800	800	0.01	969	1000	-3.14
Type2-128	697	700	-0.46	796	800	-0.47	944	900	4.84
Type2-129	700	700	-0.05	798	800	-0.26	957	900	6.37
Type2-130	700	700	-0.05	798	800	-0.26	957	900	6.37
Type2-131	700	700	-0.05	798	800	-0.26	957	900	6.37
Type2-132	700	700	-0.05	798	800	-0.26	957	900	6.37
Type2-133	700	700	-0.05	798	800	-0.26	957	900	6.37
Type2-134	700	700	-0.04	800	800	-0.06	953	900	5.87
Type2-135	700	700	-0.04	800	800	-0.06	953	1000	-4.71
Type2-136	700	700	-0.04	800	800	-0.06	953	1000	-4.71
Type2-137	700	700	-0.04	800	800	-0.06	953	900	5.87
Type2-138	697	700	-0.43	796	800	-0.50	962	900	6.92
Type2-139	697	700	-0.43	796	800	-0.50	962	900	6.92
Type2-140	697	700	-0.43	796	800	-0.50	962	1000	-3.77
Type2-141	700	700	0.02	796	800	-0.53	959	900	6.56
Type2-142	700	700	0.02	796	800	-0.53	959	1000	-4.10
Type2-143	701	700	0.16	799	800	-0.09	958	900	6.45
Type2-144	701	700	0.16	799	800	-0.09	958	900	6.45
Type2-145	698	700	-0.28	797	800	-0.36	941	900	4.54
Type2-146	698	700	-0.28	797	800	-0.36	941	900	4.54
Type2-147	698	700	-0.28	797	800	-0.36	941	900	4.54
Type2-148	698	700	-0.28	797	800	-0.36	941	900	4.54

Type2-149	698	700	-0.28	797	800	-0.36	941	1000	-5.91
Type2-150	699	700	-0.20	806	800	0.78	1185	1000	18.53
Type2-151	699	700	-0.20	806	800	0.78	1185	1200	-1.22
Type2-152	699	700	-0.20	806	800	0.78	1185	1200	-1.22
Type2-153	699	700	-0.20	806	800	0.78	1185	1200	-1.22
Type2-154	698	700	-0.32	801	800	0.16	1143	1000	14.32
Type2-155	698	700	-0.32	801	800	0.16	1143	1200	-4.73
Type2-156	700	700	-0.04	795	800	-0.62	1176	1000	17.60
Type2-157	699	700	-0.21	810	800	1.27	1162	1200	-3.13
Type2-158	699	700	-0.21	810	800	1.27	1162	1200	-3.13
Type2-159	700	700	0.05	801	800	0.07	1158	1200	-3.48
Type2-160	700	700	0.05	801	800	0.07	1158	1200	-3.48
Type2-161	700	700	0.05	801	800	0.07	1158	1200	-3.48
Type2-162	704	700	0.58	805	800	0.62	1149	1200	-4.27
Type2-163	700	700	-0.03	806	800	0.73	1150	1000	15.03
Type2-164	700	700	-0.03	806	800	0.73	1150	1200	-4.14
Type2-165	704	700	0.64	806	800	0.69	1136	1200	-5.33
Type2-166	704	700	0.64	806	800	0.69	1136	1200	-5.33
Type2-167	697	700	-0.44	806	800	0.77	1140	1000	13.98
Type2-168	697	700	-0.44	806	800	0.77	1140	1000	13.98
Type2-169	697	700	-0.44	806	800	0.77	1140	1200	-5.02
Type2-170	484	300	61.33	913	1000	-8.69	1514	1500	0.94
Type2-171	484	300	61.33	913	1200	-23.91	1514	1500	0.94
Type2-172	684	900	-24.03	913	800	14.14	1514	1500	0.94
Type2-173	710	800	-11.27	827	800	3.43	1494	1500	-0.43
Type2-174	710	900	-21.13	827	800	3.43	1494	1500	-0.43
Type2-175	427	300	42.33	845	1100	-23.16	1505	1500	0.32
Type2-176	427	300	42.33	845	1200	-29.56	1505	1500	0.32
Type2-177	727	900	-19.23	845	800	5.66	1505	1500	0.32
Type2-178	727	900	-19.23	845	800	5.66	1505	1500	0.32
Type2-179	689	900	-23.47	923	800	15.39	1516	1500	1.03
Type2-180	498	300	66.00	951	1100	-13.56	1491	1500	-0.62
Type2-181	698	900	-22.48	951	800	18.86	1491	1500	-0.62
Type2-182	698	800	-12.79	951	900	5.65	1491	1500	-0.62
Type2-183	473	300	57.67	903	1100	-17.89	1502	1500	0.10
Type2-184	473	300	57.67	903	1200	-24.73	1502	1500	0.10
Type2-185	673	900	-25.25	903	800	12.91	1502	1500	0.10
Type2-186	673	900	-25.25	903	800	12.91	1502	1500	0.10
Type2-187	772	900	-14.27	919	800	14.84	1513	1500	0.83
Type2-188	629	900	-30.16	863	800	7.82	1482	1500	-1.20
Type2-189	629	900	-30.16	863	800	7.82	1482	1500	-1.20

Table E.8: Error percentage for building type 3

	Beam width /mm			D.	المسد المسدا	- /	Column width /mm			
D '11'			ı		am depth	l				
Building	NN	Target	Error/%	NN	Target	Error/%	NN	Target	Error/%	
Type3-1	514	500	2.84	679	600	13.17	1054	900	17.12	
Type3-2	514	500	2.84	679	600	13.17	1054	900	17.12	
Type3-3	518	500	3.50	657	700	-6.13	1066	1200	-11.16	
Type3-4	552	500	10.33	721	800	-9.84	1020	1100	-7.28	
Type3-5	552	600	-8.06	721	700	3.04	1020	1000	1.99	
Type3-6	538	500	7.65	715	600	19.19	1027	900	14.08	
Type3-7	538	600	-10.29	715	700	2.17	1027	1000	2.68	
Type3-8	538	500	7.65	715	800	-10.60	1027	1100	-6.66	
Type3-9	542	600	-9.64	726	700	3.69	1028	1000	2.78	
Type3-10	546	600	-9.07	699	700	-0.21	998	1000	-0.20	
Type3-11	546	600	-9.07	699	700	-0.21	998	1000	-0.20	
Type3-12	522	500	4.48	722	800	-9.71	1013	1100	-7.88	
Type3-13	533	500	6.65	742	600	23.73	1021	900	13.46	
Type3-14	533	600	-11.12	742	700	6.06	1021	1000	2.11	
Type3-15	503	500	0.57	667	700	-4.77	999	1100	-9.21	
Type3-16	503	500	0.57	667	700	-4.77	999	1100	-9.21	
Type3-17	503	500	0.65	664	700	-5.09	987	1100	-10.25	
Type3-18	531	600	-11.54	660	700	-5.72	980	1000	-1.96	
Type3-19	531	600	-11.54	660	700	-5.72	980	1000	-1.96	
Type3-20	545	600	-9.09	673	700	-3.84	974	1000	-2.56	
Type3-21	503	500	0.61	700	700	0.00	994	1100	-9.67	
Type3-22	503	500	0.61	700	700	0.00	994	1100	-9.67	
Type3-23	542	500	8.50	676	600	12.59	990	900	10.04	
Type3-24	536	500	7.20	630	700	-9.96	985	1000	-1.49	
Type3-25	536	500	7.20	630	700	-9.96	985	1100	-10.44	
Type3-26	583	600	-2.82	581	600	-3.22	962	1000	-3.83	
Type3-27	572	600	-4.67	585	600	-2.53	972	800	21.54	
Type3-28	572	500	14.40	585	700	-16.45	972	1000	-2.77	
Type3-29	533	500	6.58	626	600	4.36	952	900	5.77	
Type3-30	533	500	6.58	626	700	-10.55	952	1100	-13.46	
Type3-31	502	500	0.42	680	700	-2.82	986	1100	-10.40	
Type3-32	502	600	-16.32	680	700	-2.82	986	1000	-1.44	
Type3-33	523	500	4.62	661	700	-5.53	1022	1100	-7.09	
Type3-34	523	600	-12.82	661	700	-5.53	1022	1000	2.20	
Type3-35	501	500	0.28	653	600	8.85	1019	900	13.27	
Type3-36	521	500	4.28	671	700	-4.17	1034	1100	-6.00	
Type3-37	601	600	0.12	692	600	15.28	1191	1000	19.06	
Type3-38	601	600	0.12	692	800	-13.54	1191	1200	-0.78	
Type3-39	601	600	0.12	692	800	-13.54	1191	1200	-0.78	
Type3-40	595	600	-0.84	640	800	-20.00	1163	1200	-3.09	
Type3-41	595	600	-0.84	640	700	-8.57	1163	1200	-3.09	

Type3-42	590	600	-1.67	701	800	-12.37	1150	1200	-4.15
Type3-43	579	600	-3.45	751	800	-6.17	1162	1200	-3.19
Type3-44	579	600	-3.45	751	800	-6.17	1162	1200	-3.19
Type3-45	573	600	-4.49	751	700	7.34	1157	1100	5.15
Type3-46	582	600	-3.01	754	800	-5.74	1117	1200	-6.91
Type3-47	577	600	-3.83	751	700	7.31	1139	1100	3.51
Type3-48	577	600	-3.83	751	800	-6.10	1139	1200	-5.12
Type3-49	440	400	9.92	577	600	-3.84	875	1000	-12.47
Type3-50	529	400	32.16	578	600	-3.65	838	800	4.72
Type3-51	529	500	5.73	578	600	-3.65	838	900	-6.92
Type3-52	493	500	-1.39	605	600	0.86	854	900	-5.13
Type3-53	476	500	-4.73	577	600	-3.92	876	900	-2.67
Type3-54	512	500	2.40	572	500	14.44	858	700	22.57
Type3-55	485	500	-3.00	567	600	-5.52	861	900	-4.29
Type3-56	540	500	8.03	716	700	2.35	1109	1000	10.88
Type3-57	545	500	9.09	660	700	-5.65	1083	1200	-9.78
Type3-58	545	700	-22.08	660	600	10.08	1083	1100	-1.57
Type3-59	545	500	9.09	660	700	-5.65	1083	1200	-9.78
Type3-60	529	600	-11.85	708	700	1.08	1095	1100	-0.43
Type3-61	551	600	-8.24	733	700	4.70	1108	1100	0.76
Type3-62	552	600	-8.04	698	700	-0.28	1097	1100	-0.31
Type3-63	552	600	-8.04	698	700	-0.28	1097	1100	-0.31
Type3-64	552	500	10.48	711	600	18.53	1107	1000	10.66
Type3-65	600	600	-0.07	738	700	5.45	1208	1200	0.68
Type3-66	603	600	0.44	798	800	-0.22	1200	1200	0.01
Type3-67	592	600	-1.32	801	800	0.17	1216	1200	1.35
Type3-68	600	600	-0.06	802	800	0.24	1195	1200	-0.40
Type3-69	605	600	0.78	802	800	0.20	1197	1200	-0.25
Type3-70	605	600	0.78	802	800	0.20	1197	1200	-0.25
Type3-71	516	600	-14.02	792	700	13.13	1434	1200	19.51
Type3-72	516	500	3.18	792	900	-12.01	1434	1500	-4.39
Type3-73	501	500	0.10	768	800	-4.03	1437	1200	19.73
Type3-74	501	600	-16.58	768	700	9.68	1437	1200	19.73
Type3-75	501	500	0.10	768	800	-4.03	1437	1500	-4.21
Type3-76	501	500	0.10	768	900	-14.70	1437	1500	-4.21
Type3-77	557	500	11.48	833	900	-7.43	1359	1500	-9.38
Type3-78	557	600	-7.10	833	800	4.14	1359	1400	-2.90
Type3-79	521	500	4.13	853	900	-5.27	1413	1500	-5.78
Type3-80	521	500	4.13	853	900	-5.27	1413	1500	-5.78
Type3-81	537	500	7.43	849	900	-5.71	1431	1200	19.27
Type3-82	537	600	-10.48	849	800	6.08	1431	1400	2.23
Type3-83	537	500	7.43	849	900	-5.71	1431	1500	-4.58
Type3-84	504	500	0.82	747	800	-6.58	1205	1200	0.41
Type3-85	502	500	0.37	750	700	7.19	1201	1200	0.08
Type3-86	504	500	0.75	753	800	-5.87	1169	1200	-2.59

Type3-87	540	500	7.95	800	700	14.29	1127	1100	2.48
Type3-88	536	500	7.22	749	800	-6.36	1133	1200	-5.57
Type3-89	536	500	7.22	749	800	-6.36	1133	1200	-5.57
Type3-90	947	600	57.83	800	900	-11.06	1500	1500	0.02
Type3-91	1047	700	49.53	800	800	0.06	1500	1500	0.02
Type3-92	1196	1200	-0.34	835	800	4.42	1496	1500	-0.27
Type3-93	938	650	44.34	847	900	-5.88	1510	1500	0.69
Type3-94	938	1200	-21.81	847	800	5.88	1510	1500	0.69
Type3-95	930	650	43.14	899	900	-0.10	1501	1500	0.07
Type3-96	930	1200	-22.47	899	800	12.39	1501	1500	0.07
Type3-97	567	600	-5.47	956	1000	-4.40	1500	1500	-0.01
Type3-98	550	600	-8.40	966	900	7.37	1491	1500	-0.63
Type3-99	554	600	-7.67	998	900	10.89	1500	1500	-0.02
Type3-100	541	600	-9.78	897	900	-0.37	1495	1500	-0.34
Type3-101	531	600	-11.43	900	900	0.00	1489	1500	-0.73
Type3-102	537	600	-10.56	1000	1000	-0.04	1500	1500	-0.03
Type3-103	532	600	-11.37	1000	1000	0.00	1495	1500	-0.33

Table E.9: Error percentage for building type 4

	В	eam widt	h/mm	Ве	am deptl	n /mm	Column width /mm			
Building	NN	Target	Error/%	NN	Target	Error/%	NN	Target	Error/%	
Type4-1	504	400	25.91	604	600	0.74	855	800	6.87	
Type4-2	504	400	25.91	604	600	0.74	855	800	6.87	
Type4-3	524	600	-12.63	600	600	0.03	875	900	-2.78	
Type4-4	490	600	-18.36	634	600	5.64	879	900	-2.35	
Type4-5	523	400	30.74	666	700	-4.85	855	800	6.88	
Type4-6	523	600	-12.84	666	600	11.01	855	900	-4.99	
Type4-7	523	600	-12.84	666	700	-4.85	855	900	-4.99	
Type4-8	541	600	-9.84	682	700	-2.56	866	900	-3.76	
Type4-9	507	600	-15.49	647	600	7.83	873	900	-2.98	
Type4-10	507	600	-15.49	647	600	7.83	873	900	-2.98	
Type4-11	483	600	-19.44	642	600	7.07	874	900	-2.84	
Type4-12	528	400	32.00	642	600	7.00	875	800	9.42	
Type4-13	528	600	-12.00	642	700	-8.29	875	900	-2.74	
Type4-14	511	500	2.13	612	700	-12.59	840	900	-6.70	
Type4-15	511	500	2.13	612	700	-12.59	840	900	-6.70	
Type4-16	474	500	-5.15	655	700	-6.42	873	900	-2.98	
Type4-17	536	600	-10.74	629	600	4.82	866	900	-3.82	
Type4-18	536	600	-10.74	629	600	4.82	866	900	-3.82	
Type4-19	519	600	-13.57	634	700	-9.41	830	900	-7.73	
Type4-20	472	500	-5.63	637	700	-8.97	886	900	-1.55	
Type4-21	472	600	-21.36	637	600	6.20	886	900	-1.55	
Type4-22	480	400	20.02	644	600	7.39	874	800	9.29	
Type4-23	516	500	3.25	583	600	-2.80	865	900	-3.86	
Type4-24	516	500	3.25	583	700	-16.69	865	900	-3.86	

Type4-25	445	500	-11.05	574	700	-18.04	881	900	-2.16
Type4-26	419	300	39.53	635	700	-9.27	886	800	10.69
Type4-27	419	500	-16.28	635	600	5.85	886	900	-1.61
Type4-28	476	400	19.08	652	600	8.60	844	800	5.46
Type4-29	476	500	-4.74	652	600	8.60	844	900	-6.26
Type4-30	490	500	-2.04	667	700	-4.67	831	900	-7.70
Type4-31	490	500	-2.04	667	700	-4.67	831	900	-7.70
Type4-32	504	500	0.70	660	700	-5.74	866	900	-3.74
Type4-33	504	500	0.70	660	700	-5.74	866	900	-3.74
Type4-34	474	400	18.42	641	600	6.92	839	800	4.89
Type4-35	485	500	-2.92	649	700	-7.28	863	900	-4.16
Type4-36	481	600	-19.75	725	700	3.61	1156	1100	5.13
Type4-37	468	400	17.10	724	700	3.44	1191	900	32.29
Type4-38	468	500	-6.32	724	700	3.44	1191	1200	-0.78
Type4-39	468	500	-6.32	724	800	-9.49	1191	1400	-14.96
Type4-40	468	500	-6.48	731	700	4.47	1169	1200	-2.61
Type4-41	468	500	-6.48	731	700	4.47	1169	1100	6.24
Type4-42	459	500	-8.20	801	700	14.37	1106	1100	0.53
Type4-43	459	600	-23.50	801	700	14.37	1106	1100	0.53
Type4-44	459	500	-8.20	801	900	-11.05	1106	1300	-14.94
Type4-45	454	500	-9.13	836	800	4.52	1157	1100	5.17
Type4-46	454	500	-9.13	836	800	4.52	1157	1100	5.17
Type4-47	454	500	-9.13	836	900	-7.09	1157	1300	-11.01
Type4-48	473	500	-5.42	789	900	-12.39	1099	1300	-15.49
Type4-49	476	600	-20.70	799	700	14.12	1165	1100	5.93
Type4-50	476	600	-20.70	799	800	-0.15	1165	1300	-10.36
Type4-51	460	400	14.88	634	700	-9.47	862	900	-4.19
Type4-52	413	400	3.35	695	700	-0.72	904	900	0.48
Type4-53	402	400	0.56	698	700	-0.35	899	900	-0.09
Type4-54	409	400	2.31	701	700	0.12	890	900	-1.12
Type4-55	434	500	-13.21	666	600	11.04	902	800	12.70
Type4-56	580	600	-3.36	839	800	4.82	1307	1300	0.55
Type4-57	580	700	-17.17	839	900	-6.83	1307	1500	-12.85
Type4-58	524	400	30.98	836	800	4.45	1383	1100	25.77
Type4-59	424	300	41.33	836	900	-7.16	1383	1300	6.42
Type4-60	504	500	0.78	819	800	2.43	1345	1400	-3.90
Type4-61	552	400	38.11	867	800	8.36	1331	1100	21.00
Type4-62	552	600	-7.93	867	800	8.36	1331	1300	2.39
Type4-63	432	300	44.00	920	1000	-7.97	1410	1200	17.51
Type4-64	516	400	29.05	882	800	10.30	1307	1100	18.85
Type4-65	424	300	41.33	850	1000	-15.05	1318	1300	1.42
Type4-66	524	600	-12.74	850	800	6.19	1318	1300	1.42
Type4-67	524	600	-12.74	850	800	6.19	1318	1300	1.42
Type4-68	524	500	4.72	850	900	-5.61	1318	1400	-5.82
Type4-69	524	700	-25.20	850	900	-5.61	1318	1500	-12.10

Type4-70	706	700	0.86	796	800	-0.48	1151	1000	15.13
Type4-71	706	700	0.86	796	800	-0.48	1151	1000	15.13
Type4-72	706	700	0.86	796	800	-0.48	1151	1200	-4.06
Type4-73	706	700	0.86	796	800	-0.48	1151	1200	-4.06
Type4-74	705	700	0.78	801	800	0.17	1115	1000	11.54
Type4-75	705	700	0.78	801	800	0.17	1115	1200	-7.05
Type4-76	705	700	0.78	801	800	0.17	1115	1200	-7.05
Type4-77	702	700	0.22	801	800	0.17	1123	1200	-6.38
Type4-78	703	700	0.44	795	800	-0.66	1135	1200	-5.43
Type4-79	703	700	0.44	795	800	-0.66	1135	1200	-5.43
Type4-80	703	700	0.44	795	800	-0.66	1135	1200	-5.43
Type4-81	703	700	0.45	799	800	-0.15	1152	1000	15.24
Type4-82	703	700	0.45	799	800	-0.15	1152	1200	-3.96
Type4-83	703	700	0.44	801	800	0.07	1151	1200	-4.09
Type4-84	373	300	24.31	1294	1300	-0.45	1498	1500	-0.12
Type4-85	340	500	-32.01	1101	900	22.36	1501	1400	7.21
Type4-86	389	300	29.74	1197	1300	-7.95	1501	1500	0.08
Type4-87	378	400	-5.49	1207	1100	9.69	1500	1500	0.00
Type4-88	378	400	-5.49	1207	1200	0.55	1500	1500	0.00
Type4-89	407	300	35.75	1152	1300	-11.35	1501	1500	0.08
Type4-90	407	400	1.81	1152	1100	4.77	1501	1500	0.08
Type4-91	807	800	0.87	901	900	0.15	1299	1300	-0.09
Type4-92	810	800	1.27	897	900	-0.32	1305	1300	0.40
Type4-93	805	800	0.62	902	900	0.19	1307	1300	0.50
Type4-94	896	900	-0.40	1000	1000	-0.05	1307	1300	0.53
Type4-95	896	900	-0.40	1000	1000	-0.05	1307	1400	-6.65
Type4-96	889	900	-1.18	999	1000	-0.06	1305	1400	-6.80
Type4-97	939	900	4.33	1000	1000	-0.02	1312	1300	0.89
Type4-98	895	900	-0.57	996	1000	-0.36	1340	1300	3.09

Table E.10: Error percentage for building type 5

	В	eam widt	h /mm	В	eam dept	h /mm	Column width /mm			
Building	NN	Target	Error/%	NN	Target	Error/%	NN	Target	Error/%	
Type5-1	464	400	15.92	567	550	3.03	783	750	4.44	
Type5-2	465	500	-7.08	580	550	5.45	775	800	-3.13	
Type5-3	408	400	1.94	600	600	0.00	767	700	9.52	
Type5-4	408	400	1.94	600	600	0.00	767	750	2.22	
Type5-5	474	400	18.41	600	600	0.00	767	750	2.22	
Type5-6	394	350	12.58	600	600	0.00	775	750	3.33	
Type5-7	359	350	2.46	600	600	0.00	770	750	2.67	
Type5-8	359	500	-28.28	600	600	0.00	770	800	-3.75	
Type5-9	453	450	0.73	600	600	0.00	783	800	-2.08	
Type5-10	541	400	35.15	724	700	3.38	1171	900	30.16	
Type5-11	541	500	8.12	724	800	-9.55	1171	1200	-2.38	
Type5-12	541	600	-9.90	724	700	3.38	1171	1200	-2.38	

L	- 41	600	1 000	704	000	0.55	1171	1200	1 220
Type5-13	541	600	-9.90	724	800	-9.55	1171	1200	-2.38
Type5-14	541	700	-22.77	724	700	3.38	1171	1200	-2.38
Type5-15	541	700	-22.77	724	700	3.38	1171	1200	-2.38
Type5-16	541	600	-9.90	724	800	-9.55	1171	1200	-2.38
Type5-17	541	700	-22.77	724	700	3.38	1171	1200	-2.38
Type5-18	541	700	-22.77	724	700	3.38	1171	1200	-2.38
Type5-19	617	700	-11.90	685	600	14.10	1156	1100	5.09
Type5-20	617	600	2.79	685	700	-2.20	1156	1200	-3.67
Type5-21	617	800	-22.91	685	600	14.10	1156	1200	-3.67
Type5-22	617	700	-11.90	685	700	-2.20	1156	1200	-3.67
Type5-23	617	800	-22.91	685	600	14.10	1156	1200	-3.67
Type5-24	617	500	23.34	685	700	-2.20	1156	1200	-3.67
Type5-25	617	700	-11.90	685	700	-2.20	1156	1200	-3.67
Type5-26	617	700	-11.90	685	700	-2.20	1156	1200	-3.67
Type5-27	617	500	23.34	685	700	-2.20	1156	1100	5.09
Type5-28	617	700	-11.90	685	700	-2.20	1156	1200	-3.67
Type5-29	617	700	-11.90	685	700	-2.20	1156	1200	-3.67
Type5-30	623	400	55.69	688	600	14.67	1168	900	29.78
Type5-31	623	400	55.69	688	700	-1.71	1168	1100	6.18
Type5-32	623	700	-11.03	688	600	14.67	1168	1100	6.18
Type5-33	623	700	-11.03	688	700	-1.71	1168	1200	-2.67
Type5-34	623	500	24.55	688	700	-1.71	1168	1100	6.18
Type5-35	623	500	24.55	688	700	-1.71	1168	1200	-2.67
Type5-36	623	500	24.55	688	700	-1.71	1168	1200	-2.67
Type5-37	623	700	-11.03	688	700	-1.71	1168	1200	-2.67
Type5-38	623	700	-11.03	688	700	-1.71	1168	1200	-2.67
Type5-39	623	700	-11.03	688	700	-1.71	1168	1200	-2.67
Type5-40	603	500	20.65	740	700	5.76	1155	1100	4.99
Type5-41	603	500	20.65	740	700	5.76	1155	1100	4.99
Type5-42	603	600	0.54	740	700	5.76	1155	1100	4.99
Type5-43	603	500	20.65	740	700	5.76	1155	1100	4.99
Type5-44	603	600	0.54	740	800	-7.46	1155	1200	-3.76
Type5-45	603	500	20.65	740	700	5.76	1155	1100	4.99
Type5-46	603	800	-24.59	740	700	5.76	1155	1200	-3.76
Type5-47	603	500	20.65	740	800	-7.46	1155	1100	4.99
Type5-48	551	400	37.78	782	700	11.66	1151	900	27.89
Type5-49	551	600	-8.15	782	800	-2.30	1151	1200	-4.08
Type5-50	551	600	-8.15	782	700	11.66	1151	1000	15.10
Type5-51	551	600	-8.15	782	800	-2.30	1151	1200	-4.08
Type5-52	551	600	-8.15	782	700	11.66	1151	1100	4.64
Type5-53	551	600	-8.15	782	800	-2.30	1151	1200	-4.08
Type5-54	551	600	-8.15	782	900	-13.15	1151	1200	-4.08
Type5-55	551	800	-31.11	782	700	11.66	1151	1200	-4.08
Type5-56	474	300	58.00	800	900	-11.11	1145	1000	14.53
Type5-57	574	500	14.86	800	800	0.00	1145	1100	4.12

Type5-58	574	800	-28.21	800	700	14.29	1145	1200	-4.56
Type5-59	574	600	-4.28	800	800	0.00	1145	1200	-4.56
Type5-60	574	800	-28.21	800	700	14.29	1145	1200	-4.56
Type5-61	574	500	14.86	800	800	0.00	1145	1100	4.12
Type5-62	574	600	-4.28	800	800	0.00	1145	1200	-4.56
Type5-63	560	500	12.10	741	700	5.88	1141	1100	3.71
Type5-64	560	500	12.10	741	700	5.88	1141	1000	14.08
Type5-65	560	500	12.10	741	900	-17.65	1141	1200	-4.93
Type5-66	560	600	-6.58	741	800	-7.35	1141	1200	-4.93
Type5-67	560	600	-6.58	741	800	-7.35	1141	1200	-4.93
Type5-68	560	500	12.10	741	700	5.88	1141	1100	3.71
Type5-69	560	700	-19.93	741	600	23.53	1141	1000	14.08
Type5-70	560	500	12.10	741	700	5.88	1141	1100	3.71
Type5-71	560	600	-6.58	741	800	-7.35	1141	1200	-4.93
Type5-72	560	700	-19.93	741	700	5.88	1141	1200	-4.93
Type5-73	560	600	-6.58	741	700	5.88	1141	1100	3.71
Type5-74	560	800	-29.94	741	700	5.88	1141	1200	-4.93
Type5-75	560	500	12.10	741	700	5.88	1141	1100	3.71
Type5-76	560	600	-6.58	741	700	5.88	1141	1100	3.71
Type5-77	560	500	12.10	741	800	-7.35	1141	1100	3.71
Type5-78	560	800	-29.94	741	700	5.88	1141	1200	-4.93
Type5-79	611	500	22.23	739	700	5.51	1146	1100	4.20
Type5-80	611	700	-12.70	739	700	5.51	1146	1200	-4.49
Type5-81	611	600	1.86	739	800	-7.68	1146	1200	-4.49
Type5-82	611	600	1.86	739	700	5.51	1146	1100	4.20
Type5-83	611	600	1.86	739	800	-7.68	1146	1200	-4.49
Type5-84	611	700	-12.70	739	700	5.51	1146	1200	-4.49
Type5-85	611	800	-23.61	739	700	5.51	1146	1200	-4.49
Type5-86	611	700	-12.70	739	700	5.51	1146	1200	-4.49
Type5-87	611	600	1.86	739	700	5.51	1146	1100	4.20
Type5-88	611	700	-12.70	739	700	5.51	1146	1200	-4.49
Type5-89	611	500	22.23	739	800	-7.68	1146	1100	4.20
Type5-90	611	600	1.86	739	800	-7.68	1146	1200	-4.49
Type5-91	611	800	-23.61	739	700	5.51	1146	1200	-4.49
Type5-92	611	600	1.86	739	800	-7.68	1146	1200	-4.49
Type5-93	550	500	10.06	746	700	6.52	1151	1100	4.63
Type5-94	550	500	10.06	746	800	-6.79	1151	1200	-4.09
Type5-95	550	700	-21.38	746	600	24.28	1151	1000	15.09
Type5-96	550	600	-8.28	746	800	-6.79	1151	1200	-4.09
Type5-97	550	600	-8.28	746	800	-6.79	1151	1200	-4.09
Type5-98	550	700	-21.38	746	700	6.52	1151	1200	-4.09
Type5-99	570	600	-5.04	693	600	15.58	1124	1000	12.35
Type5-100	570	400	42.45	693	700	-0.93	1124	1000	12.35
Type5-101	570	600	-5.04	693	700	-0.93	1124	1200	-6.37
Type5-102	570	500	13.96	693	700	-0.93	1124	1100	2.14

Type5-103	570	600	-5.04	693	700	-0.93	1124	1200	-6.37
Type5-104	570	600	-5.04	693	700	-0.93	1124	1200	-6.37
Type5-105	543	500	8.64	669	600	11.54	1121	1000	12.12
Type5-106	543	500	8.64	669	700	-4.40	1121	1100	1.92
Type5-107	543	600	-9.47	669	700	-4.40	1121	1200	-6.57
Type5-108	543	600	-9.47	669	700	-4.40	1121	1200	-6.57
Type5-109	543	600	-9.47	669	600	11.54	1121	1000	12.12
Type5-110	543	400	35.80	667	600	11.11	1131	900	25.69
Type5-111	543	600	-9.47	667	600	11.11	1131	1000	13.12
Type5-112	543	500	8.64	667	700	-4.76	1131	1100	2.84
Type5-113	543	400	35.80	667	700	-4.76	1131	1000	13.12
Type5-114	543	600	-9.47	667	600	11.11	1131	1100	2.84
Type5-115	543	600	-9.47	667	700	-4.76	1131	1200	-5.73
Type5-116	543	600	-9.47	667	700	-4.76	1131	1200	-5.73
Type5-117	543	600	-9.47	667	700	-4.76	1131	1200	-5.73
Type5-118	543	600	-9.47	667	700	-4.76	1131	1200	-5.73
Type5-119	543	600	-9.47	667	700	-4.76	1131	1200	-5.73
Type5-120	543	600	-9.47	667	700	-4.76	1131	1200	-5.73
Type5-121	545	400	36.31	727	800	-9.11	1130	1000	13.04
Type5-122	545	500	9.05	727	800	-9.11	1130	1200	-5.80
Type5-123	545	500	9.05	727	700	3.87	1130	1100	2.77
Type5-124	545	600	-9.13	727	700	3.87	1130	1200	-5.80
Type5-125	545	500	9.05	727	700	3.87	1130	1100	2.77
Type5-126	545	600	-9.13	727	800	-9.11	1130	1200	-5.80
Type5-127	545	600	-9.13	727	700	3.87	1130	1200	-5.80
Type5-128	545	600	-9.13	727	700	3.87	1130	1200	-5.80
Type5-129	545	600	-9.13	727	800	-9.11	1130	1200	-5.80
Type5-130	545	500	9.05	727	700	3.87	1130	1100	2.77
Type5-131	545	600	-9.13	727	800	-9.11	1130	1200	-5.80
Type5-132	545	600	-9.13	727	800	-9.11	1130	1200	-5.80
Type5-133	545	600	-9.13	727	800	-9.11	1130	1200	-5.80
Type5-134	521	400	30.21	769	700	9.87	1129	900	25.40
Type5-135	521	500	4.17	769	700	9.87	1129	1100	2.60
Type5-136	521	500	4.17	769	700	9.87	1129	1100	2.60
Type5-137	521	400	30.21	769	800	-3.86	1129	1000	12.86
Type5-138	521	500	4.17	769	900	-14.55	1129	1200	-5.95
Type5-139	521	600	-13.19	769	800	-3.86	1129	1200	-5.95
Type5-140	521	500	4.17	769	900	-14.55	1129	1200	-5.95
Type5-141	521	600	-13.19	769	800	-3.86	1129	1200	-5.95
Type5-142	521	700	-25.59	769	700	9.87	1129	1100	2.60
Type5-143	521	600	-13.19	769	800	-3.86	1129	1200	-5.95
Type5-144	521	600	-13.19	769	800	-3.86	1129	1200	-5.95
Type5-145	521	600	-13.19	769	800	-3.86	1129	1200	-5.95
Type5-146	525	400	31.14	781	900	-13.24	1129	1200	-5.90
Type5-147	525	500	4.92	781	700	11.55	1129	1100	2.65

Type5-148	525	400	31.14	781	800	-2.39	1129	1000	12.92
Type5-149	525	500	4.92	781	700	11.55	1129	1000	12.92
Type5-150	525	600	-12.57	781	800	-2.39	1129	1200	-5.90
Type5-151	525	400	31.14	781	900	-13.24	1129	1200	-5.90
Type5-152	525	500	4.92	781	900	-13.24	1129	1200	-5.90
Type5-153	525	600	-12.57	781	800	-2.39	1129	1200	-5.90
Type5-154	525	400	31.14	781	900	-13.24	1129	1200	-5.90
Type5-155	518	500	3.53	737	700	5.26	1146	1100	4.20
Type5-156	518	400	29.42	737	800	-7.89	1146	1000	14.62
Type5-157	518	600	-13.72	737	700	5.26	1146	1100	4.20
Type5-158	518	500	3.53	737	700	5.26	1146	1100	4.20
Type5-159	518	600	-13.72	737	800	-7.89	1146	1200	-4.49
Type5-160	518	500	3.53	737	700	5.26	1146	1100	4.20
Type5-161	518	600	-13.72	737	800	-7.89	1146	1200	-4.49
Type5-162	518	500	3.53	737	700	5.26	1146	1100	4.20
Type5-163	518	500	3.53	737	700	5.26	1146	1100	4.20
Type5-164	518	400	29.42	737	900	-18.13	1146	1200	-4.49
Type5-165	518	600	-13.72	737	700	5.26	1146	1200	-4.49
Type5-166	518	500	3.53	737	700	5.26	1146	1100	4.20
Type5-167	518	500	3.53	737	700	5.26	1146	1100	4.20
Type5-168	518	600	-13.72	737	700	5.26	1146	1200	-4.49
Type5-169	518	600	-13.72	737	800	-7.89	1146	1200	-4.49
Type5-170	422	300	40.67	736	800	-8.00	1135	1000	13.46
Type5-171	422	300	40.67	736	800	-8.00	1135	1000	13.46
Type5-172	522	500	4.40	736	700	5.14	1135	1000	13.46
Type5-173	522	500	4.40	736	700	5.14	1135	1100	3.15
Type5-174	522	600	-13.00	736	700	5.14	1135	1200	-5.45
Type5-175	522	600	-13.00	736	800	-8.00	1135	1200	-5.45
Type5-176	522	600	-13.00	736	700	5.14	1135	1200	-5.45
Type5-177	522	600	-13.00	736	700	5.14	1135	1200	-5.45
Type5-178	522	500	4.40	736	700	5.14	1135	1100	3.15
Type5-179	522	600	-13.00	736	700	5.14	1135	1200	-5.45
Type5-180	522	600	-13.00	736	700	5.14	1135	1200	-5.45
Type5-181	522	600	-13.00	736	800	-8.00	1135	1200	-5.45
Type5-182	522	500	4.40	736	700	5.14	1135	1100	3.15
Type5-183	481	400	20.26	576	600	-4.01	825	800	3.19
Type5-184	481	400	20.26	576	600	-4.01	825	1000	-17.45
Type5-185	481	400	20.26	576	600	-4.01	825	800	3.19
Type5-186	481	400	20.26	576	600	-4.01	825	1000	-17.45
Type5-187	481	400	20.26	576	600	-4.01	825	800	3.19
Type5-188	481	500	-3.79	576	600	-4.01	825	900	-8.28
Type5-189	481	400	20.26	576	600	-4.01	825	1000	-17.45
Type5-190	481	600	-19.83	576	500	15.19	825	800	3.19
Type5-191	481	400	20.26	576	600	-4.01	825	800	3.19
Type5-192	481	500	-3.79	576	600	-4.01	825	900	-8.28

Type5-193	425	400	6.33	588	600	-2.08	886	800	10.80
Type5-194	425	400	6.33	588	500	17.50	886	700	26.62
Type5-195	425	500	-14.94	588	500	17.50	886	800	10.80
Type5-196	425	500	-14.94	588	500	17.50	886	700	26.62
Type5-197	425	400	6.33	588	600	-2.08	886	1000	-11.36
Type5-198	425	400	6.33	588	600	-2.08	886	800	10.80
Type5-199	425	400	6.33	588	600	-2.08	886	800	10.80
Type5-200	425	400	6.33	588	600	-2.08	886	1000	-11.36
Type5-201	425	400	6.33	588	600	-2.08	886	1000	-11.36
Type5-202	424	400	6.12	590	600	-1.67	884	800	10.50
Type5-203	424	400	6.12	590	500	18.00	884	700	26.29
Type5-204	424	500	-15.10	590	500	18.00	884	800	10.50
Type5-205	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-206	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-207	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-208	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-209	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-210	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-211	424	500	-15.10	590	600	-1.67	884	900	-1.78
Type5-212	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-213	424	400	6.12	590	600	-1.67	884	1000	-11.60
Type5-214	480	400	20.05	592	500	18.46	837	600	39.46
Type5-215	480	300	60.07	592	700	-15.38	837	800	4.59
Type5-216	480	300	60.07	592	700	-15.38	837	800	4.59
Type5-217	480	500	-3.96	592	600	-1.28	837	900	-7.03
Type5-218	480	500	-3.96	592	600	-1.28	837	900	-7.03
Type5-219	480	400	20.05	592	600	-1.28	837	800	4.59
Type5-220	480	500	-3.96	592	600	-1.28	837	900	-7.03
Type5-221	480	500	-3.96	592	600	-1.28	837	900	-7.03
Type5-222	437	400	9.16	628	600	4.61	854	800	6.79
Type5-223	437	500	-12.67	628	600	4.61	854	800	6.79
Type5-224	437	500	-12.67	628	600	4.61	854	800	6.79
Type5-225	437	400	9.16	628	700	-10.33	854	900	-5.07
Type5-226	437	400	9.16	628	700	-10.33	854	900	-5.07
Type5-227	437	600	-27.23	628	500	25.53	854	700	22.05
Type5-228	437	500	-12.67	628	600	4.61	854	900	-5.07
Type5-229	437	400	9.16	628	600	4.61	854	800	6.79
Type5-230	437	400	9.16	628	700	-10.33	854	1000	-14.57
Type5-231	437	400	9.16	628	700	-10.33	854	1000	-14.57
Type5-232	437	400	9.16	628	700	-10.33	854	1000	-14.57
Type5-233	425	400	6.28	676	600	12.75	883	800	10.38
Type5-234	425	400	6.28	676	600	12.75	883	800	10.38
Type5-235	425	600	-29.15	676	500	35.29	883	700	26.15
Type5-236	425	400	6.28	676	700	-3.36	883	900	-1.89
Type5-237	425	600	-29.15	676	500	35.29	883	700	26.15

Type5-238	425	400	6.28	676	700	-3.36	883	800	10.38
Type5-239	425	400	6.28	676	800	-15.44	883	1000	-11.70
Type5-240	425	400	6.28	676	700	-3.36	883	1000	-11.70
Type5-241	425	400	6.28	676	600	12.75	883	800	10.38
Type5-242	425	400	6.28	676	700	-3.36	883	800	10.38
Type5-243	425	400	6.28	676	700	-3.36	883	1000	-11.70
Type5-244	425	400	6.28	676	700	-3.36	883	1000	-11.70
Type5-245	425	600	-29.15	676	500	35.29	883	700	26.15
Type5-246	425	400	6.28	676	700	-3.36	883	1000	-11.70
Type5-247	479	400	19.67	597	600	-0.43	838	800	4.75
Type5-248	479	300	59.56	597	700	-14.65	838	800	4.75
Type5-249	479	400	19.67	597	600	-0.43	838	900	-6.89
Type5-250	479	600	-20.22	597	500	19.49	838	800	4.75
Type5-251	479	500	-4.27	597	600	-0.43	838	900	-6.89
Type5-252	479	400	19.67	597	600	-0.43	838	800	4.75
Type5-253	479	400	19.67	597	600	-0.43	838	800	4.75
Type5-254	479	500	-4.27	597	600	-0.43	838	900	-6.89
Type5-255	479	400	19.67	597	600	-0.43	838	800	4.75
Type5-256	479	500	-4.27	597	600	-0.43	838	900	-6.89
Type5-257	479	500	-4.27	597	600	-0.43	838	900	-6.89
Type5-258	479	400	19.67	597	600	-0.43	838	800	4.75
Type5-259	479	500	-4.27	597	600	-0.43	838	900	-6.89
Type5-260	436	400	8.99	589	600	-1.81	828	800	3.50
Type5-261	436	300	45.32	589	700	-15.84	828	800	3.50
Type5-262	436	500	-12.81	589	500	17.83	828	700	18.29
Type5-263	436	400	8.99	589	600	-1.81	828	800	3.50
Type5-264	436	600	-27.34	589	500	17.83	828	800	3.50
Type5-265	436	600	-27.34	589	500	17.83	828	800	3.50
Type5-266	436	400	8.99	589	600	-1.81	828	800	3.50
Type5-267	436	400	8.99	589	600	-1.81	828	800	3.50
Type5-268	436	400	8.99	589	600	-1.81	828	800	3.50
Type5-269	436	400	8.99	589	600	-1.81	828	800	3.50
Type5-270	436	500	-12.81	589	600	-1.81	828	900	-8.00
Type5-271	436	500	-12.81	589	600	-1.81	828	900	-8.00
Type5-272	436	500	-12.81	589	600	-1.81	828	900	-8.00
Type5-273	469	400	17.14	590	600	-1.63	835	800	4.34
Type5-274	469	500	-6.29	590	500	18.04	835	700	19.24
Type5-275	469	500	-6.29	590	600	-1.63	835	900	-7.26
Type5-276	469	600	-21.90	590	500	18.04	835	800	4.34
Type5-277	469	500	-6.29	590	600	-1.63	835	900	-7.26
Type5-278	469	400	17.14	590	600	-1.63	835	800	4.34
Type5-279	469	500	-6.29	590	600	-1.63	835	900	-7.26
Type5-280	469	400	17.14	590	600	-1.63	835	800	4.34
Type5-281	469	600	-21.90	590	500	18.04	835	800	4.34
Type5-282	469	500	-6.29	590	600	-1.63	835	900	-7.26

Type5-283	469	500	-6.29	590	600	-1.63	835	900	-7.26
Type5-284	604	400	51.00	700	800	-12.50	1183	1200	-1.39
Type5-285	704	900	-21.76	700	700	0.00	1183	1200	-1.39
Type5-286	731	800	-8.62	650	600	8.33	1133	1200	-5.56
Type5-287	731	900	-18.77	650	700	-7.14	1133	1200	-5.56
Type5-288	652	400	63.00	714	800	-10.71	1180	1100	7.27
Type5-289	752	800	-5.97	714	700	2.04	1180	1200	-1.67
Type5-290	494	300	64.67	800	1000	-20.00	1189	1200	-0.93
Type5-291	504	300	68.00	787	1000	-21.25	1183	1200	-1.39
Type5-292	704	900	-21.73	787	700	12.50	1183	1200	-1.39
Type5-293	807	900	-10.31	740	700	5.71	1157	1200	-3.57
Type5-294	807	800	0.90	740	700	5.71	1157	1200	-3.57
Type5-295	807	900	-10.31	740	700	5.71	1157	1200	-3.57
Type5-296	783	900	-12.96	743	700	6.12	1157	1200	-3.57
Type5-297	682	500	36.44	750	800	-6.25	1162	1100	5.68
Type5-298	682	900	-24.20	750	700	7.14	1162	1200	-3.13
Type5-299	682	800	-14.72	750	700	7.14	1162	1200	-3.13
Type5-300	425	300	41.67	730	800	-8.70	1200	1200	0.00
Type5-301	625	800	-21.82	730	700	4.35	1200	1200	0.00
Type5-302	625	500	25.09	730	700	4.35	1200	1200	0.00
Type5-303	625	600	4.24	730	800	-8.70	1200	1200	0.00
Type5-304	625	900	-30.50	730	600	21.74	1200	1200	0.00
Type5-305	625	600	4.24	730	700	4.35	1200	1200	0.00
Type5-306	625	600	4.24	730	800	-8.70	1200	1200	0.00
Type5-307	625	700	-10.65	730	700	4.35	1200	1200	0.00
Type5-308	625	700	-10.65	730	700	4.35	1200	1200	0.00
Type5-309	482	300	60.67	671	900	-25.46	1190	1200	-0.79
Type5-310	682	500	36.42	671	800	-16.15	1190	1200	-0.79
Type5-311	682	600	13.69	671	700	-4.17	1190	1200	-0.79
Type5-312	682	800	-14.74	671	600	11.81	1190	1200	-0.79
Type5-313	492	300	64.00	776	900	-13.76	1200	1200	0.00
Type5-314	692	700	-1.11	776	700	10.88	1200	1200	0.00
Type5-315	692	800	-13.47	776	700	10.88	1200	1200	0.00
Type5-316	652	600	8.72	762	700	8.93	1200	1200	0.00
Type5-317	652	800	-18.46	762	700	8.93	1200	1200	0.00
Type5-318	652	500	30.46	762	800	-4.69	1200	1200	0.00
Type5-319	652	600	8.72	762	800	-4.69	1200	1200	0.00
Type5-320	652	600	8.72	762	700	8.93	1200	1200	0.00
Type5-321	569	500	13.88	714	700	2.04	1189	1100	8.12
Type5-322	569	900	-36.73	714	600	19.05	1189	1200	-0.89
Type5-323	569	700	-18.66	714	700	2.04	1189	1200	-0.89
Type5-324	569	600	-5.10	714	700	2.04	1189	1200	-0.89
Type5-325	569	700	-18.66	714	700	2.04	1189	1200	-0.89
Type5-326	588	600	-1.95	669	700	-4.40	1183	1200	-1.45
Type5-327	588	700	-15.95	669	600	11.54	1183	1200	-1.45

Type5-328	588	400	47.08	669	800	-16.35	1183	1200	-1.45
Type5-329	588	500	17.66	669	700	-4.40	1183	1200	-1.45
Type5-330	588	700	-15.95	669	600	11.54	1183	1200	-1.45
Type5-331	588	600	-1.95	669	700	-4.40	1183	1200	-1.45
Type5-332	596	600	-0.73	678	700	-3.17	1184	1200	-1.32
Type5-333	596	700	-14.91	678	700	-3.17	1184	1200	-1.32
Type5-334	596	400	48.91	678	700	-3.17	1184	1200	-1.32
Type5-335	596	700	-14.91	678	600	12.96	1184	1200	-1.32
Type5-336	496	300	65.33	738	1000	-26.19	1190	1100	8.18
Type5-337	596	600	-0.65	738	700	5.44	1190	1200	-0.83
Type5-338	596	400	49.03	738	800	-7.74	1190	1200	-0.83
Type5-339	596	600	-0.65	738	700	5.44	1190	1200	-0.83
Type5-340	596	600	-0.65	738	700	5.44	1190	1200	-0.83
Type5-341	551	600	-8.11	804	800	0.54	1195	1200	-0.40
Type5-342	551	500	10.27	804	800	0.54	1195	1200	-0.40
Type5-343	551	700	-21.23	804	700	14.91	1195	1200	-0.40
Type5-344	551	600	-8.11	804	800	0.54	1195	1200	-0.40
Type5-345	551	700	-21.23	804	700	14.91	1195	1200	-0.40
Type5-346	557	600	-7.22	786	800	-1.79	1192	1200	-0.67
Type5-347	557	600	-7.22	786	800	-1.79	1192	1200	-0.67
Type5-348	557	400	39.17	786	900	-12.70	1192	1200	-0.67
Type5-349	592	600	-1.32	757	700	8.07	1192	1200	-0.69
Type5-350	592	700	-15.42	757	700	8.07	1192	1200	-0.69
Type5-351	592	400	48.01	757	800	-5.43	1192	1200	-0.69
Type5-352	592	600	-1.32	757	700	8.07	1192	1200	-0.69
Type5-353	592	700	-15.42	757	700	8.07	1192	1200	-0.69
Type5-354	592	600	-1.32	757	700	8.07	1192	1200	-0.69
Type5-355	488	300	62.67	748	900	-16.93	1191	1200	-0.72
Type5-356	588	600	-2.01	748	700	6.80	1191	1200	-0.72
Type5-357	588	600	-2.01	748	700	6.80	1191	1200	-0.72
Type5-358	588	700	-16.01	748	700	6.80	1191	1200	-0.72
Type5-359	588	600	-2.01	748	700	6.80	1191	1200	-0.72
Type5-360	585	500	17.09	738	800	-7.81	1190	1200	-0.79
Type5-361	585	600	-2.43	738	700	5.36	1190	1200	-0.79
Type5-362	585	700	-16.37	738	700	5.36	1190	1200	-0.79
Type5-363	585	600	-2.43	738	700	5.36	1190	1200	-0.79