Supplementary Material for "Analytic Evaluation of Splines and Their Derivatives Generated by the Six-Direction Cubic Box-Spline"

February 19, 2021

In each table, the topmost row denotes the multi-indices of the coefficients and the leftmost column denotes the stencil offsets.

Table 1: The BB-coefficients for the blue type, multiplied by $384 = 2^7 \cdot 3$. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	3	2	1	0	2	1	0	1	0	0	2	1	0	1	0	0	1	0	0	0
	0	1	2	3	0	1	2	0	1	0	0	1	2	0	1	0	0	1	0	0
	0	0	0	0	1	1	1	2	2	3	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	3
(1, 2, 1)																	1		1	2
(1, 2, 0)								4		4				2		4	1		3	2
(0, 2, 1)	4				4						4			2			3		1	2
(0, 2, 0)	4				4			4		4	4			4		4	3		3	2
(2, 1, 1)																		1	1	2
(2, 1, 0)									4	4					2	4		1	3	2
(1, 1, 2)																	1	1		2
(1, 1, 1)	16	20	20	16	20	24	20	20	20	16	24	28	24	28	28	24	34	34	34	42
(1, 1, 0)	16	20	20	16	28	32	28	44	44	56	24	28	24	40	40	56	34	34	50	42
(1, 1,−1)								4	4	16				2	2	8	1	1	4	2
(0, 1, 2)	4	4									4	2					3	1		2
(0, 1, 1)	56	44	28	16	44	32	20	28	20	16	56	40	24	40	28	24	50	34	34	42
(0, 1, 0)	56	44	28	16	68	48	28	68	44	56	56	40	24	60	40	56	50	34	50	42
(0, 1,−1)	4	4			8	4		12	4	16	4	2		6	2	8	3	1	4	2
(−1, 1, 1)	16	4			4						8	2		2			4	1	1	2
(−1, 1, 0)	16	4			12	4		8	4	4	8	2		6	2	4	4	1	3	2
(2, 0, 1)				4			4						4		2			3	1	2
(2, 0, 0)				4			4		4	4			4		4	4		3	3	2
(1, 0, 2)			4	4								2	4				1	3		2
(1, 0, 1)	16	28	44	56	20	32	44	20	28	16	24	40	56	28	40	24	34	50	34	42
(1, 0, 0)	16	28	44	56	28	48	68	44	68	56	24	40	56	40	60	56	34	50	50	42
(1, 0,−1)			4	4		4	8	4	12	16		2	4	2	6	8	1	3	4	2
(0, 0, 2)	4	4	4	4							4	4	4				3	3		2
(0, 0, 1)	56	68	68	56	44	48	44	28	28	16	56	60	56	40	40	24	50	50	34	42
(0, 0, 0)	56	68	68	56	68	72	68	68	68	56	56	60	56	60	60	56	50	50	50	42
(0, 0,−1)	4	4	4	4	8	8	8	12	12	16	4	4	4	6	6	8	3	3	4	2
(−1, 0, 1)	16	12	8	4	4	4	4				8	6	4	2	2		4	3	1	2
(−1, 0, 0)	16	12	8	4	12	8	4	8	4	4	8	6	4	6	4	4	4	3	3	2
(1,−1, 1)			4	16			4					2	8		2		1	4	1	2
(1,−1, 0)			4	16		4	12	4	8	4		2	8	2	6	4	1	4	3	2
(0,−1, 1)	4	8	12	16	4	4	4				4	6	8	2	2		3	4	1	2
(0,−1, 0)	4	8	12	16	4	8	12	4	8	4	4	6	8	4	6	4	3	4	3	2

Table 2: The BB-coefficients for the green type, multiplied by $384 = 2^7 \cdot 3$. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(b) of the main document.

	3	2	1	0	2	1	0	1	0	0	2	1	0	1	0	0	1	0	0	0
	0	1	2	3	0	1	2	0	1	0	0	1	2	0	1	0	0	1	0	0
	0	0	0	0	1	1	1	2	2	3	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	3
(1, 2, 0)																		4		4
(0, 2, 1)				4									4							
(0, 2, 0)				4									4					4		4
(2, 1, 0)																			4	4
(1, 1, 1)			8	16		8	20	8	20	16		8	20	8	24	20	8	20	20	16
(1, 1, 0)	8	12	16	16	12	16	20	16	20	16	16	24	28	24	32	28	32	44	44	56
(1, 1,−1)																	8	4	4	16
(0, 1, 2)				4			4													
(0, 1, 1)	8	16	32	56	12	24	44	16	28	16	12	24	44	16	32	20	16	28	20	16
(0, 1, 0)	32	48	56	56	32	40	44	24	28	16	48	64	68	40	48	28	56	68	44	56
(0, 1,−1)	8	8	8	4	4	4	4				12	12	8	4	4		16	12	4	16
(−1, 1, 1)			8	16			4						4							
(−1, 1, 0)	8	12	16	16	4	4	4				8	12	12	4	4		8	8	4	4
(2, 0, 1)										4						4				
(2, 0, 0)										4						4			4	4
(1, 0, 2)									4	4										
(1, 0, 1)	8	12	16	16	16	24	28	32	44	56	12	16	20	24	32	44	16	20	28	16
(1, 0, 0)	32	32	24	16	48	40	28	56	44	56	48	40	28	64	48	68	56	44	68	56
(1, 0,−1)	8	4			8	4		8	4	4	12	4		12	4	8	16	4	12	16
(0, 0, 2)				4			4		4	4										
(0, 0, 1)	32	48	56	56	48	64	68	56	68	56	32	40	44	40	48	44	24	28	28	16
(0, 0, 0)	96	96	80	56	96	88	68	80	68	56	96	88	68	88	72	68	80	68	68	56
(0, 0,−1)	32	16	8	4	16	8	4	8	4	4	32	16	8	16	8	8	24	12	12	16
(−1, 0, 1)	8	12	16	16	8	12	12	8	8	4	4	4	4	4	4	4				
(−1, 0, 0)	32	32	24	16	16	16	12	8	8	4	16	16	12	8	8	4	8	8	4	4
(−1, 0,−1)	8	4									4									
(1,−1, 1)								8	4	16						4				
(1,−1, 0)	8	4			12	4		16	4	16	8	4		12	4	12	8	4	8	4
(0,−1, 1)	8	8	8	4	12	12	8	16	12	16	4	4	4	4	4	4				
(0,−1, 0)	32	16	8	4	32	16	8	24	12	16	16	8	4	16	8	12	8	4	8	4
(0,−1,−1)	8				4						4									
(−1,−1, 0)	8	4			4															

Table 3: The BB-coefficients for the red type, multiplied by $384 = 2^7 \cdot 3$. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(c) of the main document.

	3	2	1	0	2	1	0	1	0	0	2	1	0	1	0	0	1	0	0	0
	0	1	2	3	0	1	2	0	1	0	0	1	2	0	1	0	0	1	0	0
	0	0	0	0	1	1	1	2	2	3	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	2	2	2	3
(1, 2, 0)																				4
(0, 2, 0)																				4
(2, 1, 0)									1	1					2	2		4	4	4
(1, 1, 1)			8	16		4	12	2	7	4		8	20	4	12	7	8	20	12	16
(1, 1, 0)	8	12	16	16	12	18	20	18	23	23	16	24	28	24	32	32	32	44	44	56
(1, 1,−1)								2	1	4				4	2	7	8	4	12	16
(0, 1, 1)	8	12	16	16	8	10	12	6	7	4	12	16	20	10	12	7	16	20	12	16
(0, 1, 0)	32	32	24	16	32	28	20	28	23	23	48	40	28	40	32	32	56	44	44	56
(0, 1,−1)	8	4			8	2		6	1	4	12	4		10	2	7	16	4	12	16
(−1, 1, 0)	8	4			4	2		2	1	1	8	4		4	2	2	8	4	4	4
(2, 0, 1)				4			4		2	1			4		2	1				
(2, 0, 0)				4			4		4	4			4		4	4		4	4	4
(2, 0,−1)										1						1				
(1, 0, 2)				4																
(1, 0, 1)	8	16	32	56	12	24	44	18	32	23	12	24	44	18	32	23	16	28	20	16
(1, 0, 0)	32	48	56	56	48	64	68	64	76	76	48	64	68	64	76	76	56	68	68	56
(1, 0,−1)	8	8	8	4	12	12	8	18	14	23	12	12	8	18	14	23	16	12	20	16
(0, 0, 2)				4																
(0, 0, 1)	32	48	56	56	32	40	44	28	32	23	32	40	44	28	32	23	24	28	20	16
(0, 0, 0)	96	96	80	56	96	88	68	88	76	76	96	88	68	88	76	76	80	68	68	56
(0, 0,−1)	32	16	8	4	32	16	8	28	14	23	32	16	8	28	14	23	24	12	20	16
(−1, 0, 1)	8	8	8	4	4	4	4	2	2	1	4	4	4	2	2	1				
(−1, 0, 0)	32	16	8	4	16	8	4	8	4	4	16	8	4	8	4	4	8	4	4	4
(−1, 0,−1)	8				4			2		1	4			2		1				
(2,−1, 0)									1	1										
(1,−1, 1)			8	16		4	12	2	7	4			4		2	1				
(1,−1, 0)	8	12	16	16	12	18	20	18	23	23	8	12	12	12	14	14	8	8	8	4
(1,−1,−1)								2	1	4						1				
(0,−1, 1)	8	12	16	16	8	10	12	6	7	4	4	4	4	2	2	1				
(0,−1, 0)	32	32	24	16	32	28	20	28	23	23	16	16	12	16	14	14	8	8	8	4
(0,−1,−1)	8	4			8	2		6	1	4	4			2		1				
(−1,−1, 0)	8	4			4	2		2	1	1										

Table 4: The BB-coefficients of b_1^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

2	1	0	1	0	0	1	0	0	0
0	1	2	0	1	0	0	1	0	0
0	0	0	1	1	2	0	0	1	0
0	0	0	0	0	0	1	1	1	2
(−1, 0, 0)	−12	−8	−4	−8	−4	−4	−6	−4	−4	−3
(−1, 0, 1)	−12	−8	−4	−4	−4		−6	−4	−2	−3
(−1, 1, 0)	−4			−4		−4	−2		−2	−1
(−1, 1, 1)	−4						−2			−1
(0,−1, 0)	−4	−8	−12	−4	−8	−4	−4	−6	−4	−3
(0,−1, 1)	−4	−8	−12	−4	−4		−4	−6	−2	−3
(0, 0,−1)				−4	−4	−8	−2	−2	−4	−2
(0, 0, 0)	−12	−16	−12	−20	−20	−24	−16	−16	−20	−16
(0, 0, 1)	−12	−16	−12	−12	−12	−8	−16	−16	−12	−16
(0, 0, 2)							−2	−2		−2
(0, 1, 0)	12	8	4	4	4		4	4		
(0, 1, 1)	12	8	4	4	4		4	4		
(0, 2, 0)	4			4		4	2		2	1
(0, 2, 1)	4						2			1
(1,−1, 0)			−4		−4	−4		−2	−2	−1
(1,−1, 1)			−4					−2		−1
(1, 0, 0)	4	8	12	4	4		4	4		
(1, 0, 1)	4	8	12	4	4		4	4		
(1, 1,−1)				4	4	8	2	2	4	2
(1, 1, 0)	12	16	12	20	20	24	16	16	20	16
(1, 1, 1)	12	16	12	12	12	8	16	16	12	16
(1, 1, 2)							2	2		2
(1, 2, 0)				4		4	2		4	3
(1, 2, 1)							2		2	3
(2, 0, 0)			4		4	4		2	2	1
(2, 0, 1)			4					2		1
(2, 1, 0)					4	4		2	4	3
(2, 1, 1)								2	2	3

Table 5: The BB-coefficients of b_2^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1, 0, 0)	−4	−4	−4	−4	−4	−4	−2	−2	−2	−1
(−1, 0, 1)	−4	−4	−4				−2	−2		−1
(−1, 1, 0)	−12	−4		−8	−4	−4	−6	−2	−4	−3
(−1, 1, 1)	−12	−4		−4			−6	−2	−2	−3
(0,−1, 0)	4	4	4	4	4	4	2	2	2	1
(0,−1, 1)	4	4	4				2	2		1
(0, 0, 0)	12		−12	4	−4		4	−4		
(0, 0, 1)	12		−12	4	−4		4	−4		
(0, 1,−1)		−4		−4	−4	−8	−2	−2	−4	−2
(0, 1, 0)	−12	−16	−12	−20	−20	−24	−16	−16	−20	−16
(0, 1, 1)	−12	−16	−12	−12	−12	−8	−16	−16	−12	−16
(0, 1, 2)		−4					−2	−2		−2
(0, 2, 0)	−4			−4		−4	−4		−4	−3
(0, 2, 1)	−4			−4			−4		−2	−3
(1,−1, 0)		4	12	4	8	4	2	6	4	3
(1,−1, 1)		4	12		4		2	6	2	3
(1, 0,−1)		4		4	4	8	2	2	4	2
(1, 0, 0)	12	16	12	20	20	24	16	16	20	16
(1, 0, 1)	12	16	12	12	12	8	16	16	12	16
(1, 0, 2)		4					2	2		2
(1, 1, 0)	4		−4	4	−4		4	−4		
(1, 1, 1)	4		−4	4	−4		4	−4		
(1, 2, 0)						−4			−2	−1
(1, 2, 1)										−1
(2, 0, 0)			4		4	4		4	4	3
(2, 0, 1)			4		4			4	2	3
(2, 1, 0)						4			2	1
(2, 1, 1)										1

Table 6: The BB-coefficients of b_3^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1, 0, 0)	−12	−8	−4	−8	−4	−4	−6	−4	−4	−3
(−1, 0, 1)	−4	−4	−4				−2	−2		−1
(−1, 1, 0)	−12	−4		−8	−4	−4	−6	−2	−4	−3
(−1, 1, 1)	−4						−2			−1
(0,−1, 0)		−4	−8		−4		−2	−4	−2	−2
(0, 0,−1)	−4	−4	−4	−8	−8	−12	−4	−4	−6	−3
(0, 0, 0)	−12	−20	−24	−16	−20	−12	−16	−20	−16	−16
(0, 0, 1)	12	4		8	4	4	4		4	
(0, 0, 2)	4	4	4				2	2		1
(0, 1,−1)	−4	−4		−8	−4	−12	−4	−2	−6	−3
(0, 1, 0)	−12	−12	−8	−16	−12	−12	−16	−12	−16	−16
(0, 1, 1)	12	4		8	4	4	4		4	
(0, 1, 2)	4						2			1
(0, 2, 0)							−2		−2	−2
(1,−1, 1)		4	8		4		2	4	2	2
(1, 0,−1)			−4		−4	−4		−2	−2	−1
(1, 0, 0)	4	4		8	4	12	4		4	
(1, 0, 1)	12	20	24	16	20	12	16	20	16	16
(1, 0, 2)		4	4				2	4		3
(1, 1,−1)						−4			−2	−1
(1, 1, 0)	4	4		8	4	12	4		4	
(1, 1, 1)	12	12	8	16	12	12	16	12	16	16
(1, 1, 2)							2	2		3
(1, 2, 1)							2		2	2
(2, 0, 0)			4		4	4		2	2	1
(2, 0, 1)			4		4			4	2	3
(2, 1, 0)						4			2	1
(2, 1, 1)								2	2	3

Table 7: The BB-coefficients of b_4^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1, 0, 0)	4	4	4	4	4	4	2	2	2	1
(−1, 0, 1)	12	8	4	4	4		6	4	2	3
(−1, 1, 0)	4			4		4	2		2	1
(−1, 1, 1)	12	4		4			6	2	2	3
(0,−1, 1)		4	8	4	4		2	4	2	2
(0, 0,−1)	−4	−4	−4	−4	−4	−4	−2	−2	−2	−1
(0, 0, 0)	−12	−4			4	12	−4		4	
(0, 0, 1)	12	20	24	16	20	12	16	20	16	16
(0, 0, 2)	4	4	4				4	4		3
(0, 1,−1)	−4			−4		−4	−2		−2	−1
(0, 1, 0)	−12	−4			4	12	−4		4	
(0, 1, 1)	12	12	8	16	12	12	16	12	16	16
(0, 1, 2)	4	4					4	2		3
(0, 2, 1)				4			2		2	2
(1,−1, 0)		−4	−8	−4	−4		−2	−4	−2	−2
(1, 0,−1)		−4	−4	−4	−8	−12	−2	−4	−6	−3
(1, 0, 0)	−12	−20	−24	−16	−20	−12	−16	−20	−16	−16
(1, 0, 1)	−4	−4			4	4	−4		4	
(1, 0, 2)			4					2		1
(1, 1,−1)				−4	−4	−12	−2	−2	−6	−3
(1, 1, 0)	−12	−12	−8	−16	−12	−12	−16	−12	−16	−16
(1, 1, 1)	−4	−4			4	4	−4		4	
(1, 1, 2)										1
(1, 2, 0)				−4			−2		−2	−2
(2, 0, 0)			−4		−4	−4		−4	−4	−3
(2, 0, 1)			−4					−2		−1
(2, 1, 0)					−4	−4		−2	−4	−3
(2, 1, 1)										−1

Table 8: The BB-coefficients of b_5^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1, 0, 0)	−8	−4		−4			−4	−2	−2	−2
(−1, 1, 1)	8	4		4			4	2	2	2
(0,−1, 0)	−4	−8	−12	−4	−8	−4	−4	−6	−4	−3
(0,−1, 1)	−4	−4	−4				−2	−2		−1
(0, 0,−1)	−4	−4	−4	−8	−8	−12	−4	−4	−6	−3
(0, 0, 0)	−24	−20	−12	−20	−16	−12	−20	−16	−16	−16
(0, 0, 1)		4	12	4	8	4		4	4	
(0, 0, 2)	4	4	4				2	2		1
(0, 1,−1)	−4			−4		−4	−2		−2	−1
(0, 1, 0)		4	4	4	8	12		4	4	
(0, 1, 1)	24	20	12	20	16	12	20	16	16	16
(0, 1, 2)	4	4					4	2		3
(0, 2, 0)	4			4		4	2		2	1
(0, 2, 1)	4			4			4		2	3
(1,−1, 0)		−4	−12	−4	−8	−4	−2	−6	−4	−3
(1,−1, 1)			−4					−2		−1
(1, 0,−1)		−4	−4	−4	−8	−12	−2	−4	−6	−3
(1, 0, 0)	−8	−12	−12	−12	−16	−12	−12	−16	−16	−16
(1, 0, 1)		4	12	4	8	4		4	4	
(1, 0, 2)			4					2		1
(1, 1,−1)						−4			−2	−1
(1, 1, 0)		4	4	4	8	12		4	4	
(1, 1, 1)	8	12	12	12	16	12	12	16	16	16
(1, 1, 2)							2	2		3
(1, 2, 0)						4			2	1
(1, 2, 1)							2		2	3
(2, 0, 0)								−2	−2	−2
(2, 1, 1)								2	2	2

Table 9: The BB-coefficients of b_6^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1, 0, 1)	−8	−4		−4	−4		−4	−2	−2	−2
(−1, 1, 0)	8	4		4	4		4	2	2	2
(0,−1, 0)	−4	−4	−4	−4	−4	−4	−2	−2	−2	−1
(0,−1, 1)	−4	−8	−12	−4	−4		−4	−6	−2	−3
(0, 0,−1)	4	4	4	4	4	4	2	2	2	1
(0, 0, 0)		4	12	−4		−12		4	−4	
(0, 0, 1)	−24	−20	−12	−20	−16	−12	−20	−16	−16	−16
(0, 0, 2)	−4	−4	−4				−4	−4		−3
(0, 1,−1)	4	4		8	4	12	4	2	6	3
(0, 1, 0)	24	20	12	20	16	12	20	16	16	16
(0, 1, 1)		4	4	−4		−4		4	−4	
(0, 1, 2)	−4						−2			−1
(0, 2, 0)	4			4		4	4		4	3
(0, 2, 1)	4						2			1
(1,−1, 0)			−4		−4	−4		−2	−2	−1
(1,−1, 1)		−4	−12		−4		−2	−6	−2	−3
(1, 0,−1)			4		4	4		2	2	1
(1, 0, 0)		4	12	−4		−12		4	−4	
(1, 0, 1)	−8	−12	−12	−12	−16	−12	−12	−16	−16	−16
(1, 0, 2)		−4	−4				−2	−4		−3
(1, 1,−1)				4	4	12	2	2	6	3
(1, 1, 0)	8	12	12	12	16	12	12	16	16	16
(1, 1, 1)		4	4	−4		−4		4	−4	
(1, 1, 2)										−1
(1, 2, 0)				4		4	2		4	3
(1, 2, 1)										1
(2, 0, 1)					−4			−2	−2	−2
(2, 1, 0)					4			2	2	2

Table 10: The BB-coefficients of g_1^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(b) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−8	−4		−4						
(−1, 0,−1)	−4	−4					−4			
(−1, 0, 0)	−16	−16	−12	−8	−8	−4	−8	−8	−4	−4
(−1, 0, 1)	−4	−8	−12	−4	−8	−4	−4	−4	−4	
(−1, 1, 0)			−4					−4		−4
(−1, 1, 1)			−4							
(0,−1,−1)	−4			−4			−4			
(0,−1, 0)	−16	−8	−4	−16	−8	−12	−8	−4	−8	−4
(0,−1, 1)	−4	−4	−4	−8	−8	−12	−4	−4	−4	
(0, 0,−1)							−8	−4	−4	−8
(0, 0, 0)		−8	−12	−8	−16	−12	−16	−20	−20	−24
(0, 0, 1)		−8	−12	−8	−16	−12	−8	−12	−12	−8
(0, 1,−1)	4	4					4			
(0, 1, 0)	16	16	12	8	8	4	8	4	4	
(0, 1, 1)	4	8	12	4	8	4	4	4	4	
(0, 2, 0)			4					4		4
(0, 2, 1)			4							
(1,−1, 0)						−4			−4	−4
(1,−1, 1)						−4				
(1, 0,−1)	4			4			4			
(1, 0, 0)	16	8	4	16	8	12	8	4	4	
(1, 0, 1)	4	4	4	8	8	12	4	4	4	
(1, 1,−1)							8	4	4	8
(1, 1, 0)	8	12	12	12	16	12	16	20	20	24
(1, 1, 1)		8	12	8	16	12	8	12	12	8
(1, 2, 0)								4		4
(2, 0, 0)						4			4	4
(2, 0, 1)						4				
(2, 1, 0)									4	4

Table 11: The BB-coefficients of g_2^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(b) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1, 0,−1)	−4									
(−1, 0, 0)	−16	−8	−4	−8	−4	−4	−8	−4	−4	−4
(−1, 0, 1)	−4	−4	−4	−4	−4	−4				
(−1, 1, 0)	−8	−12	−12	−4	−4		−8	−8	−4	−4
(−1, 1, 1)		−8	−12		−4			−4		
(0,−1,−1)	4									
(0,−1, 0)	16	8	4	8	4	4	8	4	4	4
(0,−1, 1)	4	4	4	4	4	4				
(0, 0, 0)		8	12	−8		−12		4	−4	
(0, 0, 1)		8	12	−8		−12		4	−4	
(0, 1,−1)	−4	−4		−4	−4		−8	−4	−4	−8
(0, 1, 0)	−16	−16	−12	−16	−16	−12	−24	−20	−20	−24
(0, 1, 1)	−4	−8	−12	−8	−16	−12	−8	−12	−12	−8
(0, 1, 2)					−4					
(0, 2, 0)			−4					−4		−4
(0, 2, 1)			−4					−4		
(1,−1, 0)	8	4		12	4	12	8	4	8	4
(1,−1, 1)				8	4	12			4	
(1, 0,−1)	4	4		4	4		8	4	4	8
(1, 0, 0)	16	16	12	16	16	12	24	20	20	24
(1, 0, 1)	4	8	12	8	16	12	8	12	12	8
(1, 0, 2)					4					
(1, 1, 0)			4			−4		4	−4	
(1, 1, 1)			4			−4		4	−4	
(1, 2, 0)										−4
(2, 0, 0)						4			4	4
(2, 0, 1)						4			4	
(2, 1, 0)										4

Table 12: The BB-coefficients of g_3^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(b) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−4	−4		−4						
(−1, 0,−1)	−8	−4					−4			
(−1, 0, 0)	−16	−16	−12	−8	−8	−4	−8	−8	−4	−4
(−1, 0, 1)			−4		−4	−4				
(−1, 1, 0)	−4	−8	−12	−4	−4		−4	−8	−4	−4
(−1, 1, 1)			−4							
(0,−1,−1)	−4			−4			−4			
(0,−1, 0)				−8	−4	−8			−4	
(0,−1, 1)	4	4		4						
(0, 0,−1)	−16	−8	−4	−8	−4	−4	−16	−8	−8	−12
(0, 0, 0)		−8	−12	−16	−20	−24	−8	−16	−20	−12
(0, 0, 1)	16	16	12	8	4		8	8	4	4
(0, 0, 2)			4		4	4				
(0, 1,−1)	−4	−4	−4	−4	−4		−8	−8	−4	−12
(0, 1, 0)		−8	−12	−8	−12	−8	−8	−16	−12	−12
(0, 1, 1)	4	8	12	4	4		4	8	4	4
(0, 1, 2)			4							
(1,−1, 0)	4			4			4			
(1,−1, 1)				8	4	8			4	
(1, 0,−1)						−4			−4	−4
(1, 0, 0)	16	8	4	8	4		16	8	4	12
(1, 0, 1)	8	12	12	16	20	24	12	16	20	12
(1, 0, 2)					4	4				
(1, 1,−1)										−4
(1, 1, 0)	4	4	4	4	4		8	8	4	12
(1, 1, 1)		8	12	8	12	8	8	16	12	12
(2, 0, 0)						4			4	4
(2, 0, 1)						4			4	
(2, 1, 0)										4

Table 13: The BB-coefficients of g_4^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(b) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	4									
(−1, 0, 0)	16	8	4	8	4	4	8	4	4	4
(−1, 0, 1)	8	12	12	8	8	4	4	4	4	
(−1, 1, 0)	4	4	4				4	4		4
(−1, 1, 1)		8	12		4			4		
(0,−1,−1)	−4									
(0,−1, 1)	4	4		8	4	8	4	4	4	
(0, 0,−1)	−16	−8	−4	−8	−4	−4	−8	−4	−4	−4
(0, 0, 0)		−8	−12		−4		8		4	12
(0, 0, 1)	16	16	12	24	20	24	16	16	20	12
(0, 0, 2)			4		4	4				
(0, 1,−1)	−4	−4	−4				−4	−4		−4
(0, 1, 0)		−8	−12		−4		8		4	12
(0, 1, 1)	4	8	12	8	12	8	8	16	12	12
(0, 1, 2)			4		4					
(0, 2, 1)								4		
(1,−1, 0)	−4	−4		−8	−4	−8	−4	−4	−4	
(1, 0,−1)	−8	−4		−8	−4	−4	−12	−4	−8	−12
(1, 0, 0)	−16	−16	−12	−24	−20	−24	−16	−16	−20	−12
(1, 0, 1)			−4		−4				4	4
(1, 0, 2)						4				
(1, 1,−1)							−8	−4	−4	−12
(1, 1, 0)	−4	−8	−12	−8	−12	−8	−8	−16	−12	−12
(1, 1, 1)			−4		−4				4	4
(1, 2, 0)								−4		
(2, 0, 0)						−4			−4	−4
(2, 0, 1)						−4				
(2, 1, 0)									−4	−4

Table 14: The BB-coefficients of g_5^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(b) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−4	−4		−4						
(−1, 0,−1)	−4	−4					−4			
(−1, 0, 0)		−8	−8		−4			−4		
(−1, 0, 1)	4	4		4						
(−1, 1, 0)	4	4					4			
(−1, 1, 1)		8	8		4			4		
(0,−1,−1)	−8			−4			−4			
(0,−1, 0)	−16	−8	−4	−16	−8	−12	−8	−4	−8	−4
(0,−1, 1)			−4		−4	−4				
(0, 0,−1)	−16	−8	−4	−8	−4	−4	−16	−8	−8	−12
(0, 0, 0)		−16	−24	−8	−20	−12	−8	−20	−16	−12
(0, 0, 1)	16	8		16	4	12	8	4	8	4
(0, 0, 2)			4		4	4				
(0, 1,−1)			−4					−4		−4
(0, 1, 0)	16	8		8	4	4	16	4	8	12
(0, 1, 1)	8	16	24	12	20	12	12	20	16	12
(0, 1, 2)			4		4					
(0, 2, 0)			4					4		4
(0, 2, 1)			4					4		
(1,−1, 0)	−4	−4		−8	−4	−12	−4	−4	−8	−4
(1,−1, 1)						−4				
(1, 0,−1)	−4	−4		−4	−4	−4	−8	−4	−8	−12
(1, 0, 0)		−8	−8	−8	−12	−12	−8	−12	−16	−12
(1, 0, 1)	4	4		8	4	12	4	4	8	4
(1, 0, 2)						4				
(1, 1,−1)										−4
(1, 1, 0)	4	4		4	4	4	8	4	8	12
(1, 1, 1)		8	8	8	12	12	8	12	16	12
(1, 2, 0)										4

Table 15: The BB-coefficients of g_6^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(b) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−4									
(−1, 0,−1)	4									
(−1, 0, 1)	−4	−8	−8	−4	−4		−4	−4	−4	
(−1, 1, 0)	4	8	8	4	4		4	4	4	
(0,−1, 0)	−16	−8	−4	−8	−4	−4	−8	−4	−4	−4
(0,−1, 1)	−8	−8	−4	−12	−8	−12	−4	−4	−4	
(0, 0,−1)	16	8	4	8	4	4	8	4	4	4
(0, 0, 0)				8	4	12	−8	−4		−12
(0, 0, 1)	−16	−24	−24	−16	−20	−12	−16	−20	−16	−12
(0, 0, 2)			−4		−4	−4				
(0, 1,−1)	8	8	4	4	4		12	8	4	12
(0, 1, 0)	16	24	24	16	20	12	16	20	16	12
(0, 1, 1)					4	4		−4		−4
(0, 1, 2)			−4							
(0, 2, 0)			4					4		4
(0, 2, 1)			4							
(1,−1, 0)	−4			−4		−4	−4		−4	−4
(1,−1, 1)				−8	−4	−12			−4	
(1, 0,−1)	4			4		4	4		4	4
(1, 0, 0)				8	4	12	−8	−4		−12
(1, 0, 1)	−4	−8	−8	−8	−12	−12	−8	−12	−16	−12
(1, 0, 2)					−4	−4				
(1, 1,−1)							8	4	4	12
(1, 1, 0)	4	8	8	8	12	12	8	12	16	12
(1, 1, 1)					4	4		−4		−4
(1, 2, 0)								4		4
(2, 0, 1)									−4	
(2, 1, 0)									4	

Table 16: The BB-coefficients of r_1^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(c) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−8	−4		−4	−2	−2				
(−1, 0,−1)	−4			−2		−1	−4		−2	
(−1, 0, 0)	−16	−8	−4	−8	−4	−4	−8	−4	−4	−4
(−1, 0, 1)	−4	−4	−4	−2	−2	−1	−4	−4	−2	
(−1, 1, 0)										−4
(0,−1,−1)	−4	−4		−6	−2	−5	−4		−2	
(0,−1, 0)	−16	−16	−12	−16	−14	−14	−8	−8	−8	−4
(0,−1, 1)	−4	−8	−12	−6	−8	−5	−4	−4	−2	
(0, 0,−1)				−4	−2	−5	−8	−4	−8	−8
(0, 0, 0)		−8	−12	−8	−12	−12	−16	−20	−20	−24
(0, 0, 1)		−8	−12	−4	−8	−5	−8	−12	−8	−8
(0, 1,−1)	4			2		1	4		2	
(0, 1, 0)	16	8	4	8	4	4	8	4	4	
(0, 1, 1)	4	4	4	2	2	1	4	4	2	
(0, 2, 0)										4
(1,−1,−1)						−1				
(1,−1, 0)			−4		−4	−4		−4	−4	−4
(1,−1, 1)			−4		−2	−1				
(1, 0,−1)	4	4		6	2	5	4		2	
(1, 0, 0)	16	16	12	16	12	12	8	4	4	
(1, 0, 1)	4	8	12	6	8	5	4	4	2	
(1, 1,−1)				4	2	5	8	4	8	8
(1, 1, 0)	8	12	12	12	14	14	16	20	20	24
(1, 1, 1)		8	12	4	8	5	8	12	8	8
(1, 2, 0)										4
(2, 0,−1)						1				
(2, 0, 0)			4		4	4		4	4	4
(2, 0, 1)			4		2	1				
(2, 1, 0)					2	2		4	4	4

Table 17: The BB-coefficients of r_2^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(c) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1, 0,−1)	−4			−2		−1				
(−1, 0, 0)	−16	−8	−4	−8	−4	−4	−8	−4	−4	−4
(−1, 0, 1)	−4	−4	−4	−2	−2	−1				
(−1, 1, 0)	−8	−4		−4	−2	−2	−8	−4	−4	−4
(0,−1,−1)	4			2		1				
(0,−1, 0)	16	8	4	8	4	4	8	4	4	4
(0,−1, 1)	4	4	4	2	2	1				
(0, 0,−1)				−4	−2	−5			−2	
(0, 0, 0)		−8	−12	−8	−12	−12		−4	−4	
(0, 0, 1)		−8	−12	−4	−8	−5		−4	−2	
(0, 1,−1)	−4	−4		−6	−2	−5	−8	−4	−8	−8
(0, 1, 0)	−16	−16	−12	−16	−14	−14	−24	−20	−20	−24
(0, 1, 1)	−4	−8	−12	−6	−8	−5	−8	−12	−8	−8
(0, 2, 0)										−4
(1,−1,−1)				4	2	5			2	
(1,−1, 0)	8	12	12	12	14	14	8	8	8	4
(1,−1, 1)		8	12	4	8	5		4	2	
(1, 0,−1)	4	4		6	2	5	8	4	8	8
(1, 0, 0)	16	16	12	16	12	12	24	20	20	24
(1, 0, 1)	4	8	12	6	8	5	8	12	8	8
(1, 1,−1)						−1			−2	
(1, 1, 0)			−4		−4	−4		−4	−4	
(1, 1, 1)			−4		−2	−1		−4	−2	
(1, 2, 0)										−4
(2,−1, 0)					2	2				
(2, 0,−1)						1			2	
(2, 0, 0)			4		4	4		4	4	4
(2, 0, 1)			4		2	1		4	2	
(2, 1, 0)										4

Table 18: The BB-coefficients of r_3^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(c) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−4	−4		−2	−2	−1				
(−1, 0,−1)	−8			−4		−2	−4		−2	
(−1, 0, 0)	−16	−8	−4	−8	−4	−4	−8	−4	−4	−4
(−1, 0, 1)			−4							
(−1, 1, 0)	−4	−4		−2	−2	−1	−4	−4	−2	−4
(0,−1,−1)	−4	−4		−6	−2	−5	−4		−2	
(0,−1, 0)		−8	−8	−4	−8	−5		−4	−2	
(0,−1, 1)	4	4		2	2	1				
(0, 0,−1)	−16	−8	−4	−16	−8	−14	−16	−8	−14	−12
(0, 0, 0)		−16	−24	−8	−20	−12	−8	−20	−12	−12
(0, 0, 1)	16	8		8	4	4	8	4	4	4
(0, 0, 2)			4							
(0, 1,−1)	−4	−4		−6	−2	−5	−8	−4	−8	−12
(0, 1, 0)		−8	−8	−4	−8	−5	−8	−12	−8	−12
(0, 1, 1)	4	4		2	2	1	4	4	2	4
(1,−1,−1)						−1				
(1,−1, 0)	4	4		6	2	5	4		2	
(1,−1, 1)		8	8	4	8	5		4	2	
(1, 0,−1)			−4		−4	−4		−4	−4	−4
(1, 0, 0)	16	8		16	4	12	16	4	12	12
(1, 0, 1)	8	16	24	12	20	14	12	20	14	12
(1, 0, 2)			4							
(1, 1,−1)						−1			−2	−4
(1, 1, 0)	4	4		6	2	5	8	4	8	12
(1, 1, 1)		8	8	4	8	5	8	12	8	12
(2,−1, 0)						1				
(2, 0, 0)			4		4	4		4	4	4
(2, 0, 1)			4		4	2		4	2	
(2, 1, 0)						1			2	4

Table 19: The BB-coefficients of r_4^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(c) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	4			2		1				
(−1, 0, 0)	16	8	4	8	4	4	8	4	4	4
(−1, 0, 1)	8	8	4	4	4	2	4	4	2	
(−1, 1, 0)	4			2		1	4		2	4
(0,−1,−1)	−4			−2		−1				
(0,−1, 0)				4	2	5			2	
(0,−1, 1)	4	8	8	6	8	5	4	4	2	
(0, 0,−1)	−16	−8	−4	−8	−4	−4	−8	−4	−4	−4
(0, 0, 0)				8	4	12	8	4	12	12
(0, 0, 1)	16	24	24	16	20	14	16	20	14	12
(0, 0, 2)			4							
(0, 1,−1)	−4			−2		−1	−4		−2	−4
(0, 1, 0)				4	2	5	8	4	8	12
(0, 1, 1)	4	8	8	6	8	5	8	12	8	12
(1,−1,−1)				−4	−2	−5			−2	
(1,−1, 0)	−4	−8	−8	−6	−8	−5	−4	−4	−2	
(1,−1, 1)					2	1				
(1, 0,−1)	−8	−8	−4	−12	−8	−14	−12	−8	−14	−12
(1, 0, 0)	−16	−24	−24	−16	−20	−12	−16	−20	−12	−12
(1, 0, 1)					4	4		4	4	4
(1, 0, 2)			4							
(1, 1,−1)				−4	−2	−5	−8	−4	−8	−12
(1, 1, 0)	−4	−8	−8	−6	−8	−5	−8	−12	−8	−12
(1, 1, 1)					2	1		4	2	4
(2,−1, 0)					−2	−1				
(2, 0,−1)						−2			−2	
(2, 0, 0)			−4		−4	−4		−4	−4	−4
(2, 0, 1)			−4							
(2, 1, 0)					−2	−1		−4	−2	−4

Table 20: The BB-coefficients of r_5^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(c) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−4	−4		−2	−2	−1				
(−1, 0,−1)	−4			−2		−1	−4		−2	
(−1, 0, 1)	4	4		2	2	1				
(−1, 1, 0)	4			2		1	4		2	
(0,−1,−1)	−8	−4		−8	−2	−6	−4		−2	
(0,−1, 0)	−16	−16	−12	−12	−12	−9	−8	−8	−6	−4
(0,−1, 1)			−4							
(0, 0,−1)	−16	−8	−4	−12	−6	−9	−16	−8	−12	−12
(0, 0, 0)		−8	−12		−8		−8	−16	−8	−12
(0, 0, 1)	16	16	12	12	12	9	8	8	6	4
(0, 0, 2)			4							
(0, 1,−1)										−4
(0, 1, 0)	16	8	4	12	6	9	16	8	12	12
(0, 1, 1)	8	12	12	8	10	6	12	16	10	12
(0, 2, 0)										4
(1,−1,−1)				−4	−2	−6			−2	
(1,−1, 0)	−4	−8	−12	−6	−12	−9	−4	−8	−6	−4
(1,−1, 1)			−4							
(1, 0,−1)	−4	−4	−4	−6	−6	−9	−8	−8	−12	−12
(1, 0, 0)		−8	−12		−8		−8	−16	−8	−12
(1, 0, 1)	4	8	12	6	12	9	4	8	6	4
(1, 0, 2)			4							
(1, 1,−1)										−4
(1, 1, 0)	4	4	4	6	6	9	8	8	12	12
(1, 1, 1)		8	12	4	10	6	8	16	10	12
(1, 2, 0)										4
(2,−1, 0)					−2	−1				
(2, 0,−1)						−1			−2	
(2, 0, 1)					2	1				
(2, 1, 0)						1			2	

Table 21: The BB-coefficients of r_6^{I}, multiplied by 2^6. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(c) of the main document.

	2	1	0	1	0	0	1	0	0	0
	0	1	2	0	1	0	0	1	0	0
	0	0	0	1	1	2	0	0	1	0
	0	0	0	0	0	0	1	1	1	2
(−1,−1, 0)	−4			−2		−1				
(−1, 0,−1)	4			2		1				
(−1, 0, 1)	−4	−4		−2	−2	−1	−4	−4	−2	
(−1, 1, 0)	4	4		2	2	1	4	4	2	
(0,−1, 0)	−16	−8	−4	−12	−6	−9	−8	−4	−6	−4
(0,−1, 1)	−8	−12	−12	−8	−10	−6	−4	−4	−2	
(0, 0,−1)	16	8	4	12	6	9	8	4	6	4
(0, 0, 0)		8	12		8		−8		−8	−12
(0, 0, 1)	−16	−16	−12	−12	−12	−9	−16	−16	−12	−12
(0, 0, 2)			−4							
(0, 1,−1)	8	4		8	2	6	12	4	10	12
(0, 1, 0)	16	16	12	12	12	9	16	16	12	12
(0, 1, 1)			4							−4
(0, 2, 0)										4
(1,−1, 0)	−4	−4	−4	−6	−6	−9	−4	−4	−6	−4
(1,−1, 1)		−8	−12	−4	−10	−6		−4	−2	
(1, 0,−1)	4	4	4	6	6	9	4	4	6	4
(1, 0, 0)		8	12		8		−8		−8	−12
(1, 0, 1)	−4	−8	−12	−6	−12	−9	−8	−16	−12	−12
(1, 0, 2)			−4							
(1, 1,−1)				4	2	6	8	4	10	12
(1, 1, 0)	4	8	12	6	12	9	8	16	12	12
(1, 1, 1)			4							−4
(1, 2, 0)										4
(2,−1, 0)						−1				
(2, 0,−1)						1				
(2, 0, 1)					−2	−1		−4	−2	
(2, 1, 0)					2	1		4	2	

Table 22: The BB-coefficients of b_1^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	−2		−2	−1
(−1, 1, 0)	2		2	1
(0,−1, 1)		−2	−2	−1
(0, 0, 0)	2	2	4	2
(0, 0, 1)	−2	−2	−4	−2
(0, 0, 2)	−2	−2		−2
(0, 1,−1)	−2		−2	−1
(0, 1, 0)	2	2	4	2
(0, 1, 1)	2	2		2
(0, 1, 2)	−2			−1
(0, 2, 1)	2			1
(1,−1, 0)		2	2	1
(1, 0,−1)		−2	−2	−1
(1, 0, 0)	2	2	4	2
(1, 0, 1)	2	2		2
(1, 0, 2)		−2		−1
(1, 1,−1)	−2	−2	−4	−2
(1, 1, 0)	−2	−2		−2
(1, 1, 1)	2	2		2
(1, 2, 0)	−2			−1
(2, 0, 1)		2		1
(2, 1, 0)		−2		−1

Table 23: The BB-coefficients of b_2^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	−2			−1
(−1, 1, 1)	2			1
(0,−1, 0)		−2		−1
(0, 0,−1)	−2	−2	−4	−2
(0, 0, 0)	−2	−2		−2
(0, 0, 1)	2	2		2
(0, 1,−1)	−2		−2	−1
(0, 1, 0)	2	2	4	2
(0, 1, 1)	2	2		2
(0, 1, 2)	−2			−1
(0, 2, 0)	2		2	1
(1,−1, 1)		2		1
(1, 0,−1)		−2	−2	−1
(1, 0, 0)	2	2	4	2
(1, 0, 1)	2	2		2
(1, 0, 2)		−2		−1
(1, 1, 0)	2	2	4	2
(1, 1, 1)	−2	−2	−4	−2
(1, 1, 2)	−2	−2		−2
(1, 2, 1)	−2		−2	−1
(2, 0, 0)		2	2	1
(2, 1, 1)		−2	−2	−1

Table 24: The BB-coefficients of b_3^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	2	2	2	1
(−1, 1, 1)	−2	−2	−2	−1
(0,−1, 1)	2	2		1
(0, 0,−1)	−2	−2	−2	−1
(0, 0, 0)	2	2	4	2
(0, 0, 1)	2	2		2
(0, 0, 2)	−2	−2		−1
(0, 1, 0)	2	2	4	2
(0, 1, 1)	−2	−2	−4	−2
(0, 1, 2)	−2	−2		−2
(0, 2, 1)			−2	−1
(1,−1, 0)	−2	−2		−1
(1, 0,−1)	−2	−2	−4	−2
(1, 0, 0)	−2	−2		−2
(1, 0, 1)	2	2		2
(1, 1,−1)			−2	−1
(1, 1, 0)	2	2	4	2
(1, 1, 1)	2	2		2
(1, 1, 2)				−1
(1, 2, 0)			2	1
(2, 0, 0)				−1
(2, 1, 1)				1

Table 25: The BB-coefficients of b_4^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	2	2		1
(−1, 1, 0)	−2	−2		−1
(0,−1, 0)	2	2	2	1
(0, 0,−1)	−2	−2	−2	−1
(0, 0, 0)	2	2	4	2
(0, 0, 1)	2	2		2
(0, 0, 2)	−2	−2		−1
(0, 1,−1)	−2	−2	−4	−2
(0, 1, 0)	−2	−2		−2
(0, 1, 1)	2	2		2
(0, 2, 0)				−1
(1,−1, 1)	−2	−2	−2	−1
(1, 0, 0)	2	2	4	2
(1, 0, 1)	−2	−2	−4	−2
(1, 0, 2)	−2	−2		−2
(1, 1,−1)			−2	−1
(1, 1, 0)	2	2	4	2
(1, 1, 1)	2	2		2
(1, 1, 2)				−1
(1, 2, 1)				1
(2, 0, 1)			−2	−1
(2, 1, 0)			2	1

Table 26: The BB-coefficients of b_5^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	2	2		1
(−1, 1, 0)	−2	−2		−1
(0,−1, 1)	−2	−2		−1
(0, 0, 0)	2	4	2	2
(0, 0, 1)	2	4	2	2
(0, 1,−1)		−2	−2	−1
(0, 1, 0)	−2	−4	−2	−2
(0, 1, 1)	2		2	2
(0, 1, 2)	2			1
(0, 2, 0)	−2		−2	−2
(0, 2, 1)	−2			−1
(1,−1, 0)		−2	−2	−1
(1,−1, 1)	−2	−4	−2	−2
(1, 0,−1)		2	2	1
(1, 0, 0)	2	4	2	2
(1, 0, 1)	−2		−2	−2
(1, 0, 2)	−2			−1
(1, 1, 0)	2		2	2
(1, 1, 1)	2		2	2
(1, 2, 0)			−2	−1
(2, 0, 1)			−2	−1
(2, 1, 0)			2	1

Table 27: The BB-coefficients of b_6^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	−2			−1
(−1, 1, 1)	2			1
(0,−1, 0)	−2	−4	−2	−2
(0,−1, 1)	−2	−2		−1
(0, 0,−1)			−2	−1
(0, 0, 0)	−2		−2	−2
(0, 0, 1)	2	4	2	2
(0, 0, 2)	2	2		1
(0, 1, 0)	2		2	2
(0, 1, 1)	2		2	2
(0, 2, 1)	−2			−1
(1,−1, 0)		−2	−2	−1
(1, 0, 0)	2	4	2	2
(1, 0, 1)	2	4	2	2
(1, 1,−1)			2	1
(1, 1, 0)	2		2	2
(1, 1, 1)	−2	−4	−2	−2
(1, 1, 2)	−2	−2		−1
(1, 2, 0)			−2	−1
(1, 2, 1)	−2		−2	−2
(2, 0, 0)		2	2	1
(2, 1, 1)		−2	−2	−1

Table 28: The BB-coefficients of b_7^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	−2		−2	−1
(−1, 1, 0)	2		2	1
(0,−1, 0)	−2	−2	−2	−1
(0,−1, 1)	−2	−4	−2	−2
(0, 0,−1)	2	2	2	1
(0, 0, 0)	2	4	2	2
(0, 0, 1)	−2		−2	−2
(0, 0, 2)				−1
(0, 1, 0)	2		2	2
(0, 1, 1)	2		2	2
(0, 2, 0)	−2		−2	−1
(1,−1, 1)		−2		−1
(1, 0, 0)	2	4	2	2
(1, 0, 1)	2	4	2	2
(1, 1,−1)	−2	−2	−2	−1
(1, 1, 0)	−2	−4	−2	−2
(1, 1, 1)	2		2	2
(1, 1, 2)				1
(1, 2, 0)	−2		−2	−2
(1, 2, 1)				−1
(2, 0, 1)		2		1
(2, 1, 0)		−2		−1

Table 29: The BB-coefficients of b_8^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	2	2	2	1
(−1, 1, 1)	−2	−2	−2	−1
(0,−1, 0)	−2	−2	−2	−1
(0, 0, 0)	2	4	2	2
(0, 0, 1)	2	4	2	2
(0, 1,−1)	2		2	1
(0, 1, 0)	2		2	2
(0, 1, 1)	−2	−4	−2	−2
(0, 1, 2)		−2		−1
(0, 2, 0)	−2		−2	−1
(0, 2, 1)	−2		−2	−2
(1,−1, 0)	−2	−4	−2	−2
(1,−1, 1)		−2		−1
(1, 0,−1)	−2		−2	−1
(1, 0, 0)	−2		−2	−2
(1, 0, 1)	2	4	2	2
(1, 0, 2)		2		1
(1, 1, 0)	2		2	2
(1, 1, 1)	2		2	2
(1, 2, 1)				−1
(2, 0, 0)				−1
(2, 1, 1)				1

Table 30: The BB-coefficients of b_9^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	−2	−2		−1
(−1, 1, 0)	−2		−2	−1
(−1, 1, 1)	−4	−2	−2	−2
(0,−1, 1)	2	2		1
(0, 0, 0)	4	2	2	2
(0, 0, 1)	4	2	2	2
(0, 1,−1)	2		2	1
(0, 1, 0)	4	2	2	2
(0, 1, 1)		−2	−2	−2
(0, 1, 2)		−2		−1
(0, 2, 1)			−2	−1
(1,−1, 0)	−2	−2		−1
(1, 0,−1)	−2		−2	−1
(1, 0, 0)	−4	−2	−2	−2
(1, 0, 1)		2	2	2
(1, 0, 2)		2		1
(1, 1, 0)		2	2	2
(1, 1, 1)		2	2	2
(1, 2, 0)			2	1
(2, 0, 0)		−2	−2	−2
(2, 0, 1)		−2		−1
(2, 1, 0)			−2	−1

Table 31: The BB-coefficients of b_{10}^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	−4	−2	−2	−2
(−1, 0, 1)	−2	−2		−1
(−1, 1, 0)	−2		−2	−1
(0,−1, 0)		−2		−1
(0, 0,−1)			−2	−1
(0, 0, 0)		−2	−2	−2
(0, 0, 1)	4	2	2	2
(0, 0, 2)	2	2		1
(0, 1, 0)	4	2	2	2
(0, 1, 1)	4	2	2	2
(0, 2, 0)	2		2	1
(1,−1, 1)		2		1
(1, 0, 0)		2	2	2
(1, 0, 1)		2	2	2
(1, 1,−1)			2	1
(1, 1, 0)		2	2	2
(1, 1, 1)	−4	−2	−2	−2
(1, 1, 2)	−2	−2		−1
(1, 2, 1)	−2		−2	−1
(2, 0, 1)		−2		−1
(2, 1, 0)			−2	−1
(2, 1, 1)		−2	−2	−2

Table 32: The BB-coefficients of b^{II}_{11}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	−2	−2	−2	−1
(−1, 1, 0)	−4	−2	−2	−2
(−1, 1, 1)	−2			−1
(0,−1, 0)	2	2	2	1
(0, 0, 0)	4	2	2	2
(0, 0, 1)	4	2	2	2
(0, 1,−1)		−2	−2	−1
(0, 1, 0)		−2	−2	−2
(0, 1, 1)	4	2	2	2
(0, 1, 2)	2			1
(0, 2, 0)				−1
(1,−1, 1)	−2	−2	−2	−1
(1, 0,−1)		2	2	1
(1, 0, 0)		2	2	2
(1, 0, 1)	−4	−2	−2	−2
(1, 0, 2)	−2			−1
(1, 1, 0)		2	2	2
(1, 1, 1)		2	2	2
(1, 2, 1)				1
(2, 0, 0)		−2	−2	−1
(2, 0, 1)		−2	−2	−2
(2, 1, 1)				−1

Table 33: The BB-coefficients of b^{II}_{12}, multiplied by 2^3. The multi-indices are specified w.r.t. the blue reference tetrahedron in Figure 5(a) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	−2	−2	−2	−1
(−1, 0, 1)	−4	−2	−2	−2
(−1, 1, 1)	−2			−1
(0,−1, 1)		−2	−2	−1
(0, 0,−1)	2	2	2	1
(0, 0, 0)	4	2	2	2
(0, 0, 1)		−2	−2	−2
(0, 0, 2)				−1
(0, 1, 0)	4	2	2	2
(0, 1, 1)	4	2	2	2
(0, 2, 1)	2			1
(1,−1, 0)		2	2	1
(1, 0, 0)		2	2	2
(1, 0, 1)		2	2	2
(1, 1,−1)	−2	−2	−2	−1
(1, 1, 0)	−4	−2	−2	−2
(1, 1, 1)		2	2	2
(1, 1, 2)				1
(1, 2, 0)	−2			−1
(2, 0, 0)		−2	−2	−1
(2, 1, 0)		−2	−2	−2
(2, 1, 1)				−1

Table 34: The BB-coefficients of g_1^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	−2	−2		−2
(−1, 1, 0)	2	2		2
(0,−1, 1)	−2		−2	−2
(0, 0, 0)	4	2	2	4
(0, 0, 1)	−4	−2	−2	−4
(0, 0, 2)		−2	−2	
(0, 1,−1)	−2	−2		−2
(0, 1, 0)	4	2	2	4
(0, 1, 1)		2	2	
(0, 1, 2)		−2		
(0, 2, 1)		2		
(1,−1, 0)	2		2	2
(1, 0,−1)	−2		−2	−2
(1, 0, 0)	4	2	2	4
(1, 0, 1)		2	2	
(1, 0, 2)			−2	
(1, 1,−1)	−4	−2	−2	−4
(1, 1, 0)		−2	−2	
(1, 1, 1)		2	2	
(1, 2, 0)		−2		
(2, 0, 1)			2	
(2, 1, 0)			−2	

Table 35: The BB-coefficients of g_2^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)		−2	−2	
(−1, 0,−1)	−2	−2		−2
(−1, 0, 0)		−2		
(−1, 0, 1)		2	2	
(−1, 1, 0)	2	2		2
(−1, 1, 1)		2		
(0,−1,−1)	−2		−2	−2
(0,−1, 0)			−2	
(0,−1, 1)		2	2	
(0, 0,−1)	−4	−2	−2	−4
(0, 0, 0)	4	2	2	4
(0, 0, 1)		2	2	
(0, 0, 2)		−2	−2	
(0, 1, 0)	4	2	2	4
(0, 1, 1)	−2	−2		−2
(0, 1, 2)		−2		
(1,−1, 0)	2		2	2
(1,−1, 1)			2	
(1, 0, 0)	4	2	2	4
(1, 0, 1)	−2		−2	−2
(1, 0, 2)			−2	
(1, 1, 1)	−4	−2	−2	−4

Table 36: The BB-coefficients of g_3^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	2			
(−1, 0, 0)	4	2	2	2
(−1, 0, 1)	−2			
(−1, 1, 1)	−4	−2	−2	−2
(0,−1,−1)	−2			
(0,−1, 1)		2	2	
(0, 0,−1)	−4	−2	−2	−2
(0, 0, 0)	4	2	2	4
(0, 0, 1)		2	2	
(0, 0, 2)		−2	−2	
(0, 1, 0)	4	2	2	4
(0, 1, 1)	−2	−2	−2	−4
(0, 1, 2)		−2	−2	
(0, 2, 1)				−2
(1,−1, 0)		−2	−2	
(1, 0,−1)	−2	−2	−2	−4
(1, 0, 0)		−2	−2	
(1, 0, 1)		2	2	
(1, 1,−1)				−2
(1, 1, 0)	2	2	2	4
(1, 1, 1)		2	2	
(1, 2, 0)				2

Table 37: The BB-coefficients of g_4^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	2			
(−1, 0,−1)	−2			
(−1, 0, 1)		2	2	
(−1, 1, 0)		−2	−2	
(0,−1, 0)	4	2	2	2
(0,−1, 1)	−2			
(0, 0,−1)	−4	−2	−2	−2
(0, 0, 0)	4	2	2	4
(0, 0, 1)		2	2	
(0, 0, 2)		−2	−2	
(0, 1,−1)	−2	−2	−2	−4
(0, 1, 0)		−2	−2	
(0, 1, 1)		2	2	
(1,−1, 1)	−4	−2	−2	−2
(1, 0, 0)	4	2	2	4
(1, 0, 1)	−2	−2	−2	−4
(1, 0, 2)		−2	−2	
(1, 1,−1)				−2
(1, 1, 0)	2	2	2	4
(1, 1, 1)		2	2	
(2, 0, 1)				−2
(2, 1, 0)				2

Table 38: The BB-coefficients of g_5^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	2	2	2	
(−1, 1, 0)	−2	−2	−2	
(0,−1, 1)	−2	−2	−2	
(0, 0, 0)	4	2	4	2
(0, 0, 1)	4	2	4	2
(0, 1,−1)	−2		−2	−2
(0, 1, 0)	−4	−2	−4	−2
(0, 1, 1)		2		2
(0, 1, 2)		2		
(0, 2, 0)		−2		−2
(0, 2, 1)		−2		
(1,−1, 0)	−2		−2	−2
(1,−1, 1)	−4	−2	−4	−2
(1, 0,−1)	2		2	2
(1, 0, 0)	4	2	4	2
(1, 0, 1)		−2		−2
(1, 0, 2)		−2		
(1, 1, 0)		2		2
(1, 1, 1)		2		2
(1, 2, 0)				−2
(2, 0, 1)				−2
(2, 1, 0)				2

Table 39: The BB-coefficients of g_6^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2	−2	−2	
(−1, 0,−1)		−2		−2
(−1, 0, 0)		−2		
(−1, 0, 1)	2	2	2	
(−1, 1, 0)		2		2
(−1, 1, 1)		2		
(0,−1,−1)	−2		−2	−2
(0,−1, 0)	−4	−2	−4	−2
(0, 0,−1)				−2
(0, 0, 0)	4	2	4	2
(0, 0, 1)	4	2	4	2
(0, 1,−1)		2		2
(0, 1, 0)		2		2
(0, 1, 1)	−2	−2	−2	
(0, 2, 0)		−2		−2
(0, 2, 1)		−2		
(1, 0,−1)	2		2	2
(1, 0, 0)	4	2	4	2
(1, 1,−1)				2
(1, 1, 0)	−2		−2	−2
(1, 1, 1)	−4	−2	−4	−2
(1, 2, 0)				−2

Table 40: The BB-coefficients of g_7^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2			
(−1, 0,−1)	2			
(−1, 0, 1)		−2		−2
(−1, 1, 0)		2		2
(0,−1, 0)	−4	−2	−2	−2
(0,−1, 1)	−2	−2	−4	−2
(0, 0,−1)	4	2	2	2
(0, 0, 0)	4	2	4	2
(0, 0, 1)		−2		−2
(0, 1,−1)	−2			
(0, 1, 0)		2		2
(0, 1, 1)		2		2
(0, 2, 0)		−2		−2
(1,−1, 1)			−2	
(1, 0, 0)	4	2	4	2
(1, 0, 1)	2	2	4	2
(1, 1,−1)	−4	−2	−2	−2
(1, 1, 0)	−2	−2	−4	−2
(1, 1, 1)		2		2
(1, 2, 0)		−2		−2
(2, 0, 1)			2	
(2, 1, 0)			−2	

Table 41: The BB-coefficients of g_8^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0,−1)	2			
(−1, 0, 0)	4	2	2	2
(−1, 1, 0)	−2			
(−1, 1, 1)	−4	−2	−2	−2
(0,−1,−1)	−2			
(0,−1, 0)	−4	−2	−2	−2
(0, 0, 0)	4	2	4	2
(0, 0, 1)	4	2	4	2
(0, 1,−1)		2		2
(0, 1, 0)		2		2
(0, 1, 1)	−2	−2	−4	−2
(0, 1, 2)			−2	
(0, 2, 0)		−2		−2
(0, 2, 1)		−2		−2
(1,−1, 0)	−2	−2	−4	−2
(1,−1, 1)			−2	
(1, 0,−1)		−2		−2
(1, 0, 0)		−2		−2
(1, 0, 1)	2	2	4	2
(1, 0, 2)			2	
(1, 1, 0)		2		2
(1, 1, 1)		2		2

Table 42: The BB-coefficients of g_9^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	−2	−2	−2	
(−1, 1, 0)	−2	−2		−2
(−1, 1, 1)	−4	−4	−2	−2
(0,−1, 1)	2	2	2	
(0, 0, 0)	4	4	2	2
(0, 0, 1)	4	4	2	2
(0, 1,−1)	2	2		2
(0, 1, 0)	4	4	2	2
(0, 1, 1)			−2	−2
(0, 1, 2)			−2	
(0, 2, 1)				−2
(1,−1, 0)	−2	−2	−2	
(1, 0,−1)	−2	−2		−2
(1, 0, 0)	−4	−4	−2	−2
(1, 0, 1)			2	2
(1, 0, 2)			2	
(1, 1, 0)			2	2
(1, 1, 1)			2	2
(1, 2, 0)				2
(2, 0, 0)			−2	−2
(2, 0, 1)			−2	
(2, 1, 0)				−2

Table 43: The BB-coefficients of g_{10}^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2	−2	−2	
(−1, 0,−1)	−2	−2		−2
(−1, 0, 0)	−4	−4	−2	−2
(0,−1,−1)			−2	−2
(0,−1, 0)			−2	
(0,−1, 1)	2	2	2	
(0, 0,−1)				−2
(0, 0, 0)	4	4	2	2
(0, 0, 1)	4	4	2	2
(0, 1,−1)	2	2		2
(0, 1, 0)	4	4	2	2
(1,−1, 0)			2	2
(1,−1, 1)			2	
(1, 0,−1)			2	2
(1, 0, 0)			2	2
(1, 0, 1)	−2	−2	−2	
(1, 1,−1)				2
(1, 1, 0)	−2	−2		−2
(1, 1, 1)	−4	−4	−2	−2
(2, 0, 0)			−2	−2
(2, 0, 1)			−2	
(2, 1, 0)				−2

Table 44: The BB-coefficients of g^{II}_{11}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0,−1)	−2			
(−1, 0, 0)	−4	−2	−2	−2
(−1, 1, 0)	−2	−4	−2	−2
(−1, 1, 1)		−2		
(0,−1,−1)	2			
(0,−1, 0)	4	2	2	2
(0, 0, 0)	4	4	2	2
(0, 0, 1)	4	4	2	2
(0, 1,−1)			−2	−2
(0, 1, 0)			−2	−2
(0, 1, 1)	2	4	2	2
(0, 1, 2)		2		
(1,−1, 0)	−2			
(1,−1, 1)	−4	−2	−2	−2
(1, 0,−1)			2	2
(1, 0, 0)			2	2
(1, 0, 1)	−2	−4	−2	−2
(1, 0, 2)		−2		
(1, 1, 0)			2	2
(1, 1, 1)			2	2
(2, 0, 0)			−2	−2
(2, 0, 1)			−2	−2

Table 45: The BB-coefficients of g_{12}^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the green reference tetrahedron in Figure 5(b) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2			
(−1, 0, 0)	−4	−2	−2	−2
(−1, 0, 1)	−2	−4	−2	−2
(−1, 1, 1)		−2		
(0,−1,−1)	2			
(0,−1, 1)			−2	−2
(0, 0,−1)	4	2	2	2
(0, 0, 0)	4	4	2	2
(0, 0, 1)			−2	−2
(0, 1, 0)	4	4	2	2
(0, 1, 1)	2	4	2	2
(0, 2, 1)		2		
(1,−1, 0)			2	2
(1, 0,−1)	−2			
(1, 0, 0)			2	2
(1, 0, 1)			2	2
(1, 1,−1)	−4	−2	−2	−2
(1, 1, 0)	−2	−4	−2	−2
(1, 1, 1)			2	2
(1, 2, 0)		−2		
(2, 0, 0)			−2	−2
(2, 1, 0)			−2	−2

Table 46: The BB-coefficients of r_1^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
$(-1,\ 0,\ 1)$	-2		-1	-2
$(-1,\ 1,\ 0)$	2		1	2
$(\ 0,-1,\ 1)$	-2	-2	-3	-2
$(\ 0,\ 0,\ 0)$	4	2	4	4
$(\ 0,\ 0,\ 1)$	-4	-2	-3	-4
$(\ 0,\ 0,\ 2)$		-2		
$(\ 0,\ 1,-1)$	-2		-1	-2
$(\ 0,\ 1,\ 0)$	4	2	3	4
$(\ 0,\ 1,\ 1)$		2		
$(\ 1,-1,\ 0)$	2	2	3	2
$(\ 1,-1,\ 1)$			-1	
$(\ 1,\ 0,-1)$	-2	-2	-3	-2
$(\ 1,\ 0,\ 0)$	4	2	4	4
$(\ 1,\ 0,\ 1)$		2		
$(\ 1,\ 0,\ 2)$		-2		
$(\ 1,\ 1,-1)$	-4	-2	-3	-4
$(\ 1,\ 1,\ 0)$		-2		
$(\ 1,\ 1,\ 1)$		2		
$(\ 2,-1,\ 0)$			1	
$(\ 2,\ 0,-1)$			-1	
$(\ 2,\ 0,\ 1)$		2		
$(\ 2,\ 1,\ 0)$		-2		

Table 47: The BB-coefficients of r_2^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)		−2		
(−1, 0,−1)	−2		−1	−2
(−1, 0, 1)		2		
(−1, 1, 0)	2		1	2
(0,−1,−1)	−2	−2	−3	−2
(0,−1, 0)		−2		
(0,−1, 1)		2		
(0, 0,−1)	−4	−2	−3	−4
(0, 0, 0)	4	2	4	4
(0, 0, 1)		2		
(0, 0, 2)		−2		
(0, 1, 0)	4	2	3	4
(0, 1, 1)	−2		−1	−2
(1,−1,−1)			−1	
(1,−1, 0)	2	2	3	2
(1,−1, 1)		2		
(1, 0, 0)	4	2	4	4
(1, 0, 1)	−2	−2	−3	−2
(1, 0, 2)		−2		
(1, 1, 1)	−4	−2	−3	−4
(2,−1, 0)			1	
(2, 0, 1)			−1	

Table 48: The BB-coefficients of r_3^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	2		1	
(−1, 0, 1)	−2		−1	
(0,−1,−1)	−2		−1	
(0,−1, 0)	4	2	3	2
(0,−1, 1)		2		
(0, 0, 0)	4	2	4	4
(0, 0, 1)	−4	−2	−3	−2
(0, 0, 2)		−2		
(0, 1, 1)	−2	−2	−3	−4
(1,−1,−1)	−4	−2	−3	−2
(1,−1, 0)		−2		
(1,−1, 1)		2		
(1, 0,−1)	−2	−2	−3	−4
(1, 0, 0)	4	2	4	4
(1, 0, 1)		2		
(1, 0, 2)		−2		
(1, 1, 0)	2	2	3	4
(1, 1, 1)			−1	−2
(2,−1, 0)		−2		
(2, 0,−1)			−1	−2
(2, 0, 1)		2		
(2, 1, 0)			1	2

Table 49: The BB-coefficients of r_4^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	2		1	
(−1, 0,−1)	−2		−1	
(−1, 0, 1)		2		
(−1, 1, 0)		−2		
(0,−1, 0)	4	2	3	2
(0,−1, 1)	−2		−1	
(0, 0,−1)	−4	−2	−3	−2
(0, 0, 0)	4	2	4	4
(0, 0, 1)		2		
(0, 0, 2)		−2		
(0, 1,−1)	−2	−2	−3	−4
(0, 1, 0)		−2		
(0, 1, 1)		2		
(1,−1, 1)	−4	−2	−3	−2
(1, 0, 0)	4	2	4	4
(1, 0, 1)	−2	−2	−3	−4
(1, 0, 2)		−2		
(1, 1,−1)			−1	−2
(1, 1, 0)	2	2	3	4
(1, 1, 1)		2		
(2, 0, 1)			−1	−2
(2, 1, 0)			1	2

Table 50: The BB-coefficients of r_5^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 1)	2	2	1	
(−1, 1, 0)	−2	−2	−1	
(0,−1, 1)	−2	−2	−1	
(0, 0, 0)	4	4	4	2
(0, 0, 1)	4	4	3	2
(0, 1,−1)	−2	−2	−3	−2
(0, 1, 0)	−4	−4	−3	−2
(0, 1, 1)				2
(0, 2, 0)				−2
(1,−1, 0)	−2	−2	−3	−2
(1,−1, 1)	−4	−4	−3	−2
(1, 0,−1)	2	2	3	2
(1, 0, 0)	4	4	4	2
(1, 0, 1)				−2
(1, 1,−1)			−1	
(1, 1, 0)				2
(1, 1, 1)				2
(1, 2, 0)				−2
(2,−1, 0)			−1	
(2, 0,−1)			1	
(2, 0, 1)				−2
(2, 1, 0)				2

Table 51: The BB-coefficients of r_6^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2	−2	−1	
(−1, 0,−1)				−2
(−1, 0, 1)	2	2	1	
(−1, 1, 0)				2
(0,−1,−1)	−2	−2	−3	−2
(0,−1, 0)	−4	−4	−3	−2
(0, 0,−1)				−2
(0, 0, 0)	4	4	4	2
(0, 0, 1)	4	4	3	2
(0, 1,−1)				2
(0, 1, 0)				2
(0, 1, 1)	−2	−2	−1	
(0, 2, 0)				−2
(1,−1,−1)			−1	
(1, 0,−1)	2	2	3	2
(1, 0, 0)	4	4	4	2
(1, 1,−1)				2
(1, 1, 0)	−2	−2	−3	−2
(1, 1, 1)	−4	−4	−3	−2
(1, 2, 0)				−2
(2, 0,−1)			1	
(2, 1, 0)			−1	

Table 52: The BB-coefficients of r_7^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2		−1	
(−1, 0,−1)	2		1	
(−1, 0, 1)				−2
(−1, 1, 0)				2
(0,−1, 0)	−4	−2	−3	−2
(0,−1, 1)	−2	−4	−3	−2
(0, 0,−1)	4	2	3	2
(0, 0, 0)	4	4	4	2
(0, 0, 1)				−2
(0, 1,−1)	−2		−1	
(0, 1, 0)				2
(0, 1, 1)				2
(0, 2, 0)				−2
(1,−1, 1)		−2	−1	
(1, 0, 0)	4	4	4	2
(1, 0, 1)	2	4	3	2
(1, 1,−1)	−4	−2	−3	−2
(1, 1, 0)	−2	−4	−3	−2
(1, 1, 1)				2
(1, 2, 0)				−2
(2, 0, 1)		2	1	
(2, 1, 0)		−2	−1	

Table 53: The BB-coefficients of r_8^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0,−1)	2		1	
(−1, 1, 0)	−2		−1	
(0,−1,−1)	−2		−1	
(0, 0,−1)	4	2	3	2
(0, 0, 0)	4	4	4	2
(0, 1,−1)				2
(0, 1, 0)	−4	−2	−3	−2
(0, 1, 1)	−2	−4	−3	−2
(0, 2, 0)				−2
(1,−1,−1)	−4	−2	−3	−2
(1,−1, 0)	−2	−4	−3	−2
(1, 0,−1)				−2
(1, 0, 0)	4	4	4	2
(1, 0, 1)	2	4	3	2
(1, 1,−1)				2
(1, 1, 0)				2
(1, 1, 1)		−2	−1	
(1, 2, 0)				−2
(2,−1, 0)		−2	−1	
(2, 0,−1)				−2
(2, 0, 1)		2	1	
(2, 1, 0)				2

Table 54: The BB-coefficients of r_9^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0, 0)	−4	−2	−2	−2
(−1, 0, 1)	−2	−2	−1	
(−1, 1, 0)	−2		−1	−2
(0,−1, 0)	4	2	2	2
(0,−1, 1)	2	2	1	
(0, 0,−1)	4	2	2	2
(0, 0, 0)	4	2	2	2
(0, 0, 1)		−2	−1	
(0, 1,−1)	2		1	2
(0, 1, 0)			−1	−2
(0, 1, 1)		−2	−2	−2
(1,−1,−1)	−4	−2	−2	−2
(1,−1, 0)	−2	−2	−1	
(1,−1, 1)		2	1	
(1, 0,−1)	−2		−1	−2
(1, 0, 0)		2	2	2
(1, 0, 1)		2	2	2
(1, 1,−1)			1	2
(1, 1, 0)		2	2	2
(2,−1, 0)		−2	−1	
(2, 0,−1)			−1	−2
(2, 0, 0)		−2	−2	−2

Table 55: The BB-coefficients of r_{10}^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2	−2	−1	
(−1, 0,−1)	−2		−1	−2
(−1, 0, 0)	−4	−2	−2	−2
(0,−1,−1)		−2	−2	−2
(0,−1, 0)		−2	−1	
(0,−1, 1)	2	2	1	
(0, 0,−1)			−1	−2
(0, 0, 0)	4	2	2	2
(0, 0, 1)	4	2	2	2
(0, 1,−1)	2		1	2
(0, 1, 0)	4	2	2	2
(1,−1, 0)		2	2	2
(1,−1, 1)		2	1	
(1, 0,−1)		2	2	2
(1, 0, 0)		2	2	2
(1, 0, 1)	−2	−2	−1	
(1, 1,−1)			1	2
(1, 1, 0)	−2		−1	−2
(1, 1, 1)	−4	−2	−2	−2
(2, 0, 0)		−2	−2	−2
(2, 0, 1)		−2	−1	
(2, 1, 0)			−1	−2

Table 56: The BB-coefficients of r_{11}^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1, 0,−1)	−2		−1	
(−1, 0, 0)	−4	−2	−2	−2
(−1, 1, 0)	−2	−2	−1	−2
(0,−1,−1)	2		1	
(0,−1, 0)	4	2	2	2
(0, 0,−1)			−1	
(0, 0, 0)	4	2	2	2
(0, 0, 1)	4	2	2	2
(0, 1,−1)		−2	−2	−2
(0, 1, 0)		−2	−1	−2
(0, 1, 1)	2	2	1	2
(1,−1,−1)			1	
(1,−1, 0)	−2		−1	
(1,−1, 1)	−4	−2	−2	−2
(1, 0,−1)		2	2	2
(1, 0, 0)		2	2	2
(1, 0, 1)	−2	−2	−1	−2
(1, 1, 0)		2	2	2
(1, 1, 1)		2	1	2
(2,−1, 0)			−1	
(2, 0, 0)		−2	−2	−2
(2, 0, 1)		−2	−1	−2

Table 57: The BB-coefficients of r_{12}^{II}, multiplied by 2^3. The multi-indices are specified w.r.t. the red reference tetrahedron in Figure 5(c) of the main document.

	1	0	0	0
	0	1	0	0
	0	0	1	0
	0	0	0	1
(−1,−1, 0)	−2		−1	
(−1, 0, 0)	−4	−2	−2	−2
(−1, 0, 1)	−2	−2	−1	−2
(0,−1,−1)	2		1	
(0,−1, 0)			−1	
(0,−1, 1)		−2	−2	−2
(0, 0,−1)	4	2	2	2
(0, 0, 0)	4	2	2	2
(0, 0, 1)		−2	−1	−2
(0, 1, 0)	4	2	2	2
(0, 1, 1)	2	2	1	2
(1,−1,−1)			1	
(1,−1, 0)		2	2	2
(1, 0,−1)	−2		−1	
(1, 0, 0)		2	2	2
(1, 0, 1)		2	2	2
(1, 1,−1)	−4	−2	−2	−2
(1, 1, 0)	−2	−2	−1	−2
(1, 1, 1)		2	1	2
(2, 0,−1)			−1	
(2, 0, 0)		−2	−2	−2
(2, 1, 0)		−2	−1	−2