

HN.2 (mod 2)

	blocks	defect	matrix
<i>G</i> :	1	15	63×12
	2	5	13×3
	3	1	2×1

Block 1:	$\varphi_{1,0}$	φ_{2+}	$\varphi_{4,0}$	φ_{5+}	$\varphi_{7,0}$	$\varphi_{8,0}$	φ_{9+}	φ_{11+}	φ_{13+}	$\varphi_{15,0}$	$\varphi_{17,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	1	.	.	.	.	.	.	.	.	.	.
$266_1 = \chi_{2+}$	2	1	.	.	.	.	.	.	.	.	.
$760_1 = \chi_{4,0}$	.	.	1	.	.	.	.	.	.	.	.
$760_2 = \chi_{4,1}$	.	.	1	.	.	.	.	.	.	.	.
$3344_1 = \chi_{5,0}$	.	.	.	.	1	.	.	.	.	.	.
$3344_2 = \chi_{5,1}$	.	.	.	.	1	.	.	.	.	.	.
$17556_1 = \chi_{6+}$	4	1	.	2	2	.	.	.	.	.	.
$8910_1 = \chi_{8,0}$	2	1	.	1	1	.	.	.	.	.	.
$8910_2 = \chi_{8,1}$	2	1	.	1	1	.	.	.	.	.	.
$9405_1 = \chi_{9,0}$	1	.	1	1	1	.	.	.	.	.	.
$9405_2 = \chi_{9,1}$	1	.	1	1	1	.	.	.	.	.	.
$16929_1 = \chi_{10,0}$	1	1	1	.	.	1	.	.	.	.	.
$16929_2 = \chi_{10,1}$	1	1	1	.	.	1	.	.	.	.	.
$70224_1 = \chi_{11+}$	.	.	2	.	.	.	.	1	.	.	.
$131670_1 = \chi_{13+}$	2	3	.	.	.	.	1	1	.	.	.
$138510_1 = \chi_{15+}$	6	4	2	2	2	2	.	.	1	.	.
$267520_1 = \chi_{18,0}$	6	2	1	2	2	2	.	.	.	.	1
$267520_2 = \chi_{18,1}$	6	2	1	2	2	2	.	.	.	.	1
$270864_1 = \chi_{19,0}$	6	2	1	2	3	2	.	.	.	.	1
$270864_2 = \chi_{19,1}$	6	2	1	2	3	2	.	.	.	.	1
$365750_1 = \chi_{20,0}$	8	3	3	2	1	1	.	1	1	1	.
$365750_2 = \chi_{20,1}$	8	3	3	2	1	1	.	1	1	1	.
$749056_1 = \chi_{21+}$	12	4	4	2	.	.	.	3	2	2	.
$406296_1 = \chi_{23,0}$	6	4	1	.	.	2	.	1	1	.	1
$406296_2 = \chi_{23,1}$	6	4	1	.	.	2	.	1	1	.	1
$653125_1 = \chi_{24,0}$	13	7	3	2	2	4	.	.	2	1	1
$653125_2 = \chi_{24,1}$	13	7	3	2	2	4	.	.	2	1	1
$1312500_1 = \chi_{25+}$	24	12	6	3	2	6	.	2	3	2	2
$1436400_1 = \chi_{27+}$	28	17	4	4	4	8	1	1	4	2	2
$1053360_1 = \chi_{29,0}$	26	12	7	6	5	6	.	1	3	2	1
$1053360_2 = \chi_{29,1}$	26	12	7	6	5	6	.	1	3	2	1
$2133054_1 = \chi_{30+}$	38	22	10	4	2	10	1	3	6	4	2
$1185030_1 = \chi_{32,0}$	20	12	5	2	1	4	1	3	3	2	1
$1185030_2 = \chi_{32,1}$	20	12	5	2	1	4	1	3	3	2	1
$1354320_1 = \chi_{33,0}$	24	14	6	2	1	8	.	1	4	2	2
$1354320_2 = \chi_{33,1}$	24	14	6	2	1	8	.	1	4	2	2
$1625184_1 = \chi_{38,0}$	30	16	7	4	4	10	.	1	4	2	3
$1625184_2 = \chi_{38,1}$	30	16	7	4	4	10	.	1	4	2	3
$2031480_1 = \chi_{39,0}$	14	8	2	2	2	4	.	.	2	.	1

(Block 1:)	$\varphi_{19,0}$
$1_1 = \chi_{1,0}$.
$1_2 = \chi_{1,1}$.
$266_1 = \chi_{2,+}$.
$760_1 = \chi_{4,0}$.
$760_2 = \chi_{4,1}$.
$3344_1 = \chi_{5,0}$.
$3344_2 = \chi_{5,1}$.
$17556_1 = \chi_{6,+}$.
$8910_1 = \chi_{8,0}$.
$8910_2 = \chi_{8,1}$.
$9405_1 = \chi_{9,0}$.
$9405_2 = \chi_{9,1}$.
$16929_1 = \chi_{10,0}$.
$16929_2 = \chi_{10,1}$.
$70224_1 = \chi_{11,+}$.
$131670_1 = \chi_{13,+}$.
$138510_1 = \chi_{15,+}$.
$267520_1 = \chi_{18,0}$.
$267520_2 = \chi_{18,1}$.
$270864_1 = \chi_{19,0}$.
$270864_2 = \chi_{19,1}$.
$365750_1 = \chi_{20,0}$.
$365750_2 = \chi_{20,1}$.
$749056_1 = \chi_{21,+}$.
$406296_1 = \chi_{23,0}$.
$406296_2 = \chi_{23,1}$.
$653125_1 = \chi_{24,0}$.
$653125_2 = \chi_{24,1}$.
$1312500_1 = \chi_{25,+}$.
$1436400_1 = \chi_{27,+}$.
$1053360_1 = \chi_{29,0}$.
$1053360_2 = \chi_{29,1}$.
$2133054_1 = \chi_{30,+}$.
$1185030_1 = \chi_{32,0}$.
$1185030_2 = \chi_{32,1}$.
$1354320_1 = \chi_{33,0}$.
$1354320_2 = \chi_{33,1}$.
$1625184_1 = \chi_{38,0}$.
$1625184_2 = \chi_{38,1}$.
$2031480_1 = \chi_{39,0}$	1

(Block 1:)	$\varphi_{1,0}$	φ_{2+}	$\varphi_{4,0}$	φ_{5+}	$\varphi_{7,0}$	$\varphi_{8,0}$	φ_{9+}	φ_{11+}	φ_{13+}	$\varphi_{15,0}$	$\varphi_{17,0}$
2031480 ₂ = $\chi_{39,1}$	14	8	2	2	2	4	.	.	2	.	1
2375000 ₁ = $\chi_{40,0}$	20	8	6	4	2	2	.	2	3	2	.
2375000 ₂ = $\chi_{40,1}$	20	8	6	4	2	2	.	2	3	2	.
2407680 ₁ = $\chi_{41,0}$	50	26	13	8	6	14	.	2	7	4	3
2407680 ₂ = $\chi_{41,1}$	50	26	13	8	6	14	.	2	7	4	3
2661120 ₁ = $\chi_{42,0}$	48	28	8	5	4	14	1	2	7	4	4
2661120 ₂ = $\chi_{42,1}$	48	28	8	5	4	14	1	2	7	4	4
2784375 ₁ = $\chi_{43,0}$	25	14	5	3	2	5	1	2	4	2	1
2784375 ₂ = $\chi_{43,1}$	25	14	5	3	2	5	1	2	4	2	1
3878280 ₁ = $\chi_{47,0}$	48	27	10	7	6	12	1	3	7	3	3
3878280 ₂ = $\chi_{47,1}$	48	27	10	7	6	12	1	3	7	3	3
4156250 ₁ = $\chi_{48,0}$	52	29	11	7	5	13	1	3	8	4	3
4156250 ₂ = $\chi_{48,1}$	52	29	11	7	5	13	1	3	8	4	3
4809375 ₁ = $\chi_{50,0}$	65	36	14	9	7	17	1	3	10	5	4
4809375 ₂ = $\chi_{50,1}$	65	36	14	9	7	17	1	3	10	5	4
5103000 ₁ = $\chi_{51,0}$	68	38	14	8	6	18	1	4	10	5	5
5103000 ₂ = $\chi_{51,1}$	68	38	14	8	6	18	1	4	10	5	5
5103000 ₃ = $\chi_{52,0}$	68	38	14	8	6	18	1	4	10	5	5
5103000 ₄ = $\chi_{52,1}$	68	38	14	8	6	18	1	4	10	5	5
5332635 ₁ = $\chi_{53,0}$	71	41	16	8	5	17	2	6	11	6	4
5332635 ₂ = $\chi_{53,1}$	71	41	16	8	5	17	2	6	11	6	4
5878125 ₁ = $\chi_{54,0}$	81	47	16	9	7	22	2	5	12	6	6
5878125 ₂ = $\chi_{54,1}$	81	47	16	9	7	22	2	5	12	6	6

(Block 1:)	$\varphi_{19,0}$	
2031480 ₂ = $\chi_{39,1}$	1	
2375000 ₁ = $\chi_{40,0}$	1	
2375000 ₂ = $\chi_{40,1}$	1	
2407680 ₁ = $\chi_{41,0}$.	
2407680 ₂ = $\chi_{41,1}$.	
2661120 ₁ = $\chi_{42,0}$	.	$\varphi_{1,0} = 1_1$
2661120 ₂ = $\chi_{42,1}$	.	$\varphi_{2+} = 264_1$
2784375 ₁ = $\chi_{43,0}$	1	$\varphi_{4,0} = 760_1$
2784375 ₂ = $\chi_{43,1}$	1	$\varphi_{5+} = 5300_1$
3878280 ₁ = $\chi_{47,0}$	1	$\varphi_{7,0} = 3344_1$
3878280 ₂ = $\chi_{47,1}$	1	$\varphi_{8,0} = 15904_1$
4156250 ₁ = $\chi_{48,0}$	1	$\varphi_{9+} = 62172_1$
4156250 ₂ = $\chi_{48,1}$	1	$\varphi_{11+} = 68704_1$
4809375 ₁ = $\chi_{50,0}$	1	$\varphi_{13+} = 86832_1$
4809375 ₂ = $\chi_{50,1}$	1	$\varphi_{15,0} = 177286_1$
5103000 ₁ = $\chi_{51,0}$	1	$\varphi_{17,0} = 217130_1$
5103000 ₂ = $\chi_{51,1}$	1	$\varphi_{19,0} = 1556136_1$
5103000 ₃ = $\chi_{52,0}$	1	
5103000 ₄ = $\chi_{52,1}$	1	
5332635 ₁ = $\chi_{53,0}$	1	
5332635 ₂ = $\chi_{53,1}$	1	
5878125 ₁ = $\chi_{54,0}$	1	
5878125 ₂ = $\chi_{54,1}$	1	

Block 2:	$\varphi_{16,0}$	$\varphi_{18,0}$	$\varphi_{20,0}$	
214016 ₁ = $\chi_{17,0}$	1	.	.	
214016 ₂ = $\chi_{17,1}$	1	.	.	
1361920 ₁ = $\chi_{34,0}$	.	1	.	
1361920 ₂ = $\chi_{34,1}$	.	1	.	
2723840 ₁ = χ_{35+}	.	2	.	$\varphi_{16,0} = 214016_1$
1575936 ₁ = $\chi_{37,0}$	1	1	.	$\varphi_{18,0} = 1361920_1$
1575936 ₂ = $\chi_{37,1}$	1	1	.	$\varphi_{20,0} = 2985984_1$
2985984 ₁ = $\chi_{44,0}$	.	.	1	
2985984 ₂ = $\chi_{44,1}$	.	.	1	
3200000 ₁ = $\chi_{45,0}$	1	.	1	
3200000 ₂ = $\chi_{45,1}$	1	.	1	
4561920 ₁ = $\chi_{49,0}$	1	1	1	
4561920 ₂ = $\chi_{49,1}$	1	1	1	

Block 3:	$\varphi_{21,0}$
$3424256_1 = \chi_{46,0}$	1
$3424256_2 = \chi_{46,1}$	1

$$\varphi_{21,0} = 3424256_1$$