

HN.2 (mod 5)

	blocks	defect	matrix
<i>G</i> :	1	6	63×32
	2	1	5×4
	3	1	5×4
	4	0	$1312500_1 = \chi_{25+}, \varphi_{17+}$
	5	0	$2375000_1 = \chi_{40,0}, \varphi_{21,0}$
	6	0	$2375000_2 = \chi_{40,1}, \varphi_{21,1}$
	7	0	$4156250_1 = \chi_{48,0}, \varphi_{24,0}$
	8	0	$4156250_2 = \chi_{48,1}, \varphi_{24,1}$

Block 1:	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{6,0}$
$1_1 = \chi_{1,0}$	1	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	1	.	.	.	.	.	.	.	.	.
$266_1 = \chi_{2+}$	.	.	1	1	.	.	.	.	.	.	.
$760_1 = \chi_{4,0}$	1	.	1	.	1	.	.	.	.	.	.
$760_2 = \chi_{4,1}$	.	1	.	1	.	1	.	.	.	.	.
$3344_1 = \chi_{5,0}$	1	.	1	1	1	.	1	.	.	.	.
$3344_2 = \chi_{5,1}$	.	1	1	1	.	1	.	1	.	.	.
$17556_1 = \chi_{6+}$	.	.	.	.	1	1	.	.	.	.	1
$8910_1 = \chi_{8,0}$	.	.	1	.	.	.	.	1	1	.	.
$8910_2 = \chi_{8,1}$	.	.	.	1	.	.	1	.	.	1	.
$9405_1 = \chi_{9,0}$	1	.	1	.	.	.	.	.	.	.	.
$9405_2 = \chi_{9,1}$	.	1	.	1	.	.	.	.	.	.	.
$16929_1 = \chi_{10,0}$	.	.	.	.	.	.	1	.	1	.	1
$16929_2 = \chi_{10,1}$	.	.	.	.	.	.	.	1	.	1	.
$70224_1 = \chi_{11+}$	1	1	1	1	1	1	1	1	1	1	2
$131670_1 = \chi_{13+}$	.	.	1	1	1	1	1	1	.	.	1
$138510_1 = \chi_{15+}$	.	.	.	.	.	.	.	.	.	.	.
$214016_1 = \chi_{17,0}$	.	.	1	1	.	1	1	1	1	.	1
$214016_2 = \chi_{17,1}$	.	.	1	1	1	.	1	1	.	1	.
$267520_1 = \chi_{18,0}$	1	.	2	.	1	.	1	.	2	.	2
$267520_2 = \chi_{18,1}$	.	1	.	2	.	1	.	1	.	2	1
$270864_1 = \chi_{19,0}$	1	.	1	1	2	1	1	.	.	.	1
$270864_2 = \chi_{19,1}$	.	1	1	1	1	2	.	1	.	.	1
$365750_1 = \chi_{20,0}$	.	.	.	.	.	.	.	.	4	.	2
$365750_2 = \chi_{20,1}$	.	.	.	.	.	.	.	.	.	4	.
$749056_1 = \chi_{21+}$	1	1	.	.	1	1	.	.	.	.	1
$406296_1 = \chi_{23,0}$	.	.	1	1	1	1	1	1	3	.	3
$406296_2 = \chi_{23,1}$	.	.	1	1	1	1	1	1	.	3	1
$1436400_1 = \chi_{27+}$	.	.	1	1	1	1	2	2	2	2	2
$1053360_1 = \chi_{29,0}$	.	.	1	.	1	1	.	.	.	.	.
$1053360_2 = \chi_{29,1}$	.	.	.	1	1	1	.	.	.	.	.
$2133054_1 = \chi_{30+}$	.	.	1	1	2	2	1	1	1	1	2
$1185030_1 = \chi_{32,0}$	1	.	2	2	2	.	1	.	.	1	.
$1185030_2 = \chi_{32,1}$	.	1	2	2	.	2	.	1	1	.	1
$1354320_1 = \chi_{33,0}$	.	.	1	.	1	.	.	1	.	2	.
$1354320_2 = \chi_{33,1}$	.	.	.	1	.	1	1	.	2	.	2
$1361920_1 = \chi_{34,0}$	1	.	2	1	2	.	1	.	.	1	.
$1361920_2 = \chi_{34,1}$	.	1	1	2	.	2	.	1	1	.	1
$2723840_1 = \chi_{35+}$	1	1	2	2	2	2	.	.	.	.	.
$1575936_1 = \chi_{37,0}$	1	.	3	2	2	2	1	1	1	1	2

(Block 1:)	$\varphi_{6,1}$	$\varphi_{7,0}$	$\varphi_{7,1}$	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$
$1_1 = \chi_{1,0}$	.	.	.	.	.	.	.	.	.	.	.
$1_2 = \chi_{1,1}$	.	.	.	.	.	.	.	.	.	.	.
$266_1 = \chi_{2,+}$	.	.	.	.	.	.	.	.	.	.	.
$760_1 = \chi_{4,0}$	.	.	.	.	.	.	.	.	.	.	.
$760_2 = \chi_{4,1}$	.	.	.	.	.	.	.	.	.	.	.
$3344_1 = \chi_{5,0}$	.	.	.	.	.	.	.	.	.	.	.
$3344_2 = \chi_{5,1}$	.	.	.	.	.	.	.	.	.	.	.
$17556_1 = \chi_{6,+}$	1	.	.	.	.	.	.	.	.	.	.
$8910_1 = \chi_{8,0}$	.	.	.	.	.	.	.	.	.	.	.
$8910_2 = \chi_{8,1}$	.	.	.	.	.	.	.	.	.	.	.
$9405_1 = \chi_{9,0}$	.	1	.	.	.	.	.	.	.	.	.
$9405_2 = \chi_{9,1}$	.	.	1	.	.	.	.	.	.	.	.
$16929_1 = \chi_{10,0}$	.	.	.	.	.	.	.	.	.	.	.
$16929_2 = \chi_{10,1}$	1	.	.	.	.	.	.	.	.	.	.
$70224_1 = \chi_{11,+}$	2	1	1	.	.	.	.	.	.	.	.
$131670_1 = \chi_{13,+}$	1	.	.	1	1	.	.	.	.	.	.
$138510_1 = \chi_{15,+}$	.	.	.	.	.	1	1	.	.	.	.
$214016_1 = \chi_{17,0}$	.	.	.	1	1	.	.	1	.	.	.
$214016_2 = \chi_{17,1}$	1	.	.	1	1	.	.	.	1	.	.
$267520_1 = \chi_{18,0}$	1	1	1	1	.	1	.	1	.	.	.
$267520_2 = \chi_{18,1}$	2	1	1	.	1	.	1	.	1	.	.
$270864_1 = \chi_{19,0}$	1	1	.	1	1	.	.	.	.	1	.
$270864_2 = \chi_{19,1}$	1	.	1	1	1	.	.	.	.	.	1
$365750_1 = \chi_{20,0}$	.	.	1	.	.	.	.	2	.	.	.
$365750_2 = \chi_{20,1}$	2	1	.	.	.	.	.	.	2	.	.
$749056_1 = \chi_{21,+}$	1	1	1	1	1	.	.	.	.	1	1
$406296_1 = \chi_{23,0}$	1	.	1	1	1	.	.	1	.	.	.
$406296_2 = \chi_{23,1}$	3	1	.	1	1	.	.	.	1	.	.
$1436400_1 = \chi_{27,+}$	2	1	1	2	2	.	.	1	1	.	.
$1053360_1 = \chi_{29,0}$	.	.	.	2	2	.	.	.	1	1	1
$1053360_2 = \chi_{29,1}$	.	.	.	2	2	.	.	1	.	1	1
$2133054_1 = \chi_{30,+}$	2	1	1	3	3	.	.	1	1	1	1
$1185030_1 = \chi_{32,0}$	1	1	.	1	2	1	1	.	1	1	.
$1185030_2 = \chi_{32,1}$	.	.	1	2	1	1	1	1	.	.	1
$1354320_1 = \chi_{33,0}$	2	1	.	1	1	.	.	.	1	.	.
$1354320_2 = \chi_{33,1}$	.	.	1	1	1	.	.	1	.	.	.
$1361920_1 = \chi_{34,0}$	1	1	.	1	2	.	.	.	1	1	.
$1361920_2 = \chi_{34,1}$	.	.	1	2	1	.	.	1	.	.	1
$2723840_1 = \chi_{35,+}$	.	2	2	1	1	1	1	.	.	2	2
$1575936_1 = \chi_{37,0}$	2	2	1	3	2	1	1	1	1	1	1

(Block 1:)	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{13,0}$	$\varphi_{13,1}$	$\varphi_{14,0}$	$\varphi_{14,1}$	$\varphi_{15,0}$	$\varphi_{15,1}$	$\varphi_{19,0}$	$\varphi_{19,1}$
$1_1 = \chi_{1,0}$
$1_2 = \chi_{1,1}$
$266_1 = \chi_{2+}$
$760_1 = \chi_{4,0}$
$760_2 = \chi_{4,1}$
$3344_1 = \chi_{5,0}$
$3344_2 = \chi_{5,1}$
$17556_1 = \chi_{6+}$
$8910_1 = \chi_{8,0}$
$8910_2 = \chi_{8,1}$
$9405_1 = \chi_{9,0}$
$9405_2 = \chi_{9,1}$
$16929_1 = \chi_{10,0}$
$16929_2 = \chi_{10,1}$
$70224_1 = \chi_{11+}$
$131670_1 = \chi_{13+}$
$138510_1 = \chi_{15+}$
$214016_1 = \chi_{17,0}$
$214016_2 = \chi_{17,1}$
$267520_1 = \chi_{18,0}$
$267520_2 = \chi_{18,1}$
$270864_1 = \chi_{19,0}$
$270864_2 = \chi_{19,1}$
$365750_1 = \chi_{20,0}$.	1	.	.	.	.	.	.	.	.
$365750_2 = \chi_{20,1}$	1	.	.	.	.	.	.	.	.	.
$749056_1 = \chi_{21+}$.	.	1	1	.	.	.	.	.	.
$406296_1 = \chi_{23,0}$.	1	.	.	.	.	.	.	.	.
$406296_2 = \chi_{23,1}$	1	.	.	.	.	.	.	.	.	.
$1436400_1 = \chi_{27+}$	1	1	.	.	1	1	.	.	.	.
$1053360_1 = \chi_{29,0}$	1	.	2	.	.	.	.	.	.	.
$1053360_2 = \chi_{29,1}$.	1	.	2	.	.	.	.	.	.
$2133054_1 = \chi_{30+}$	1	1	1	1	1	1	.	.	.	.
$1185030_1 = \chi_{32,0}$	1	.	.	.
$1185030_2 = \chi_{32,1}$	1	.	.
$1354320_1 = \chi_{33,0}$	1	.	.	.	.	1	1	.	.	.
$1354320_2 = \chi_{33,1}$.	1	.	.	1	.	.	1	.	.
$1361920_1 = \chi_{34,0}$	1	.	1	.	.	.	1	.	.	.
$1361920_2 = \chi_{34,1}$.	1	.	1	.	.	.	1	.	.
$2723840_1 = \chi_{35+}$.	.	1	1	.	.	.	.	1	1
$1575936_1 = \chi_{37,0}$	1	.	1	.	.	1	.	.	.	.

(Block 1:)	$\varphi_{1,0}$	$\varphi_{1,1}$	$\varphi_{2,0}$	$\varphi_{2,1}$	$\varphi_{3,0}$	$\varphi_{3,1}$	$\varphi_{4,0}$	$\varphi_{4,1}$	$\varphi_{5,0}$	$\varphi_{5,1}$	$\varphi_{6,0}$
$1575936_2 = \chi_{37,1}$.	1	2	3	2	2	1	1	1	1	2
$1625184_1 = \chi_{38,0}$.	.	2	2	1	1	.	.	.	.	.
$1625184_2 = \chi_{38,1}$.	.	2	2	1	1	.	.	.	.	.
$2031480_1 = \chi_{39,0}$	1	.	1	.	.	1	.
$2031480_2 = \chi_{39,1}$	1	.	1	1	.	1
$2407680_1 = \chi_{41,0}$	1	.	2	.	2	.	.	.	.	.	.
$2407680_2 = \chi_{41,1}$.	1	.	2	.	2	.	.	.	.	1
$2661120_1 = \chi_{42,0}$.	.	2	3	1	1	1	1	1	.	1
$2661120_2 = \chi_{42,1}$.	.	3	2	1	1	1	1	.	1	.
$2985984_1 = \chi_{44,0}$.	.	2	1	2	1	1	1	3	.	3
$2985984_2 = \chi_{44,1}$.	.	1	2	1	2	1	1	.	3	1
$3424256_1 = \chi_{46,0}$.	.	1	2	2	1	1	.	.	.	.
$3424256_2 = \chi_{46,1}$.	.	2	1	1	2	.	1	.	.	.
$3878280_1 = \chi_{47,0}$.	.	2	2	1	1	.	.	.	.	.
$3878280_2 = \chi_{47,1}$.	.	2	2	1	1	.	.	.	.	.
$4561920_1 = \chi_{49,0}$	1	.	3	2	4	2	1	1	.	.	1
$4561920_2 = \chi_{49,1}$.	1	2	3	2	4	1	1	.	.	2
$5103000_1 = \chi_{51,0}$.	.	3	3	2	4	1	1	1	.	1
$5103000_2 = \chi_{51,1}$.	.	3	3	4	2	1	1	.	1	.
$5103000_3 = \chi_{52,0}$.	.	3	3	2	4	1	1	1	.	1
$5103000_4 = \chi_{52,1}$.	.	3	3	4	2	1	1	.	1	.
$5332635_1 = \chi_{53,0}$.	.	3	2	3	2	.	1	.	.	.
$5332635_2 = \chi_{53,1}$.	.	2	3	2	3	1	.	.	.	1

(Block 1:)	$\varphi_{6,1}$	$\varphi_{7,0}$	$\varphi_{7,1}$	$\varphi_{8,0}$	$\varphi_{8,1}$	$\varphi_{9,0}$	$\varphi_{9,1}$	$\varphi_{10,0}$	$\varphi_{10,1}$	$\varphi_{11,0}$	$\varphi_{11,1}$
1575936 ₂ = $\chi_{37,1}$	2	1	2	2	3	1	1	1	1	1	1
1625184 ₁ = $\chi_{38,0}$	.	1	1	2	1	1	1	1	.	1	1
1625184 ₂ = $\chi_{38,1}$	.	1	1	1	2	1	1	.	1	1	1
2031480 ₁ = $\chi_{39,0}$	1	1	.	1	2	.	.	.	1	1	.
2031480 ₂ = $\chi_{39,1}$	.	.	1	2	1	.	.	1	.	.	1
2407680 ₁ = $\chi_{41,0}$	1	3	.	1	1	1	.	.	.	2	.
2407680 ₂ = $\chi_{41,1}$	.	.	3	1	1	.	1	.	.	.	2
2661120 ₁ = $\chi_{42,0}$	.	1	2	2	1	1	1	1	.	.	1
2661120 ₂ = $\chi_{42,1}$	1	2	1	1	2	1	1	.	1	1	.
2985984 ₁ = $\chi_{44,0}$	1	1	1	4	3	1	.	3	.	1	1
2985984 ₂ = $\chi_{44,1}$	3	1	1	3	4	.	1	.	3	1	1
3424256 ₁ = $\chi_{46,0}$	.	1	1	2	3	.	1	.	1	2	1
3424256 ₂ = $\chi_{46,1}$	.	1	1	3	2	1	.	1	.	1	2
3878280 ₁ = $\chi_{47,0}$	.	2	3	1	2	1	1	.	1	1	2
3878280 ₂ = $\chi_{47,1}$	.	3	2	2	1	1	1	1	.	2	1
4561920 ₁ = $\chi_{49,0}$	2	3	2	3	4	1	1	.	1	3	2
4561920 ₂ = $\chi_{49,1}$	1	2	3	4	3	1	1	1	.	2	3
5103000 ₁ = $\chi_{51,0}$	.	1	2	6	5	1	1	2	1	2	3
5103000 ₂ = $\chi_{51,1}$	1	2	1	5	6	1	1	1	2	3	2
5103000 ₃ = $\chi_{52,0}$	.	1	2	6	5	1	1	2	1	2	3
5103000 ₄ = $\chi_{52,1}$	1	2	1	5	6	1	1	1	2	3	2
5332635 ₁ = $\chi_{53,0}$	1	3	2	4	4	1	1	1	1	3	2
5332635 ₂ = $\chi_{53,1}$	.	2	3	4	4	1	1	1	1	2	3

(Block 1:)	$\varphi_{12,0}$	$\varphi_{12,1}$	$\varphi_{13,0}$	$\varphi_{13,1}$	$\varphi_{14,0}$	$\varphi_{14,1}$	$\varphi_{15,0}$	$\varphi_{15,1}$	$\varphi_{19,0}$	$\varphi_{19,1}$
$1575936_2 = \chi_{37,1}$	.	1	.	1	1	.	.	.	.	.
$1625184_1 = \chi_{38,0}$	.	.	.	1	.	.	.	.	1	.
$1625184_2 = \chi_{38,1}$	.	.	1	.	.	.	.	.	.	1
$2031480_1 = \chi_{39,0}$	1	.	1	.	1	1	1	.	.	.
$2031480_2 = \chi_{39,1}$	.	1	.	1	1	1	.	1	.	.
$2407680_1 = \chi_{41,0}$	.	.	.	1	.	1	1	.	.	1
$2407680_2 = \chi_{41,1}$	.	.	1	.	1	.	.	1	1	.
$2661120_1 = \chi_{42,0}$	.	.	.	.	1	1	.	1	1	.
$2661120_2 = \chi_{42,1}$	.	.	.	.	1	1	1	.	.	1
$2985984_1 = \chi_{44,0}$	.	2	.	2	1	1	.	1	.	.
$2985984_2 = \chi_{44,1}$	2	.	2	.	1	1	1	.	.	.
$3424256_1 = \chi_{46,0}$	1	.	2	.	1	1	1	.	1	.
$3424256_2 = \chi_{46,1}$	.	1	.	2	1	1	.	1	.	1
$3878280_1 = \chi_{47,0}$	.	.	1	.	1	1	1	.	1	1
$3878280_2 = \chi_{47,1}$	.	.	.	1	1	1	.	1	1	1
$4561920_1 = \chi_{49,0}$	.	.	1	1	1	1	1	.	1	1
$4561920_2 = \chi_{49,1}$	.	.	1	1	1	1	.	1	1	1
$5103000_1 = \chi_{51,0}$	1	1	2	2	2	1	.	1	1	.
$5103000_2 = \chi_{51,1}$	1	1	2	2	1	2	1	.	.	1
$5103000_3 = \chi_{52,0}$	1	1	2	2	2	1	.	1	1	.
$5103000_4 = \chi_{52,1}$	1	1	2	2	1	2	1	.	.	1
$5332635_1 = \chi_{53,0}$	1	.	2	1	1	2	1	.	1	1
$5332635_2 = \chi_{53,1}$	.	1	1	2	2	1	.	1	1	1

$\varphi_{1,0} = 1_1$	$\varphi_{9,0} = 69255_1$
$\varphi_{1,1} = 1_2$	$\varphi_{9,1} = 69255_2$
$\varphi_{2,0} = 133_1$	$\varphi_{10,0} = 84798_1$
$\varphi_{2,1} = 133_2$	$\varphi_{10,1} = 84798_2$
$\varphi_{3,0} = 626_1$	$\varphi_{11,0} = 131747_1$
$\varphi_{3,1} = 626_2$	$\varphi_{11,1} = 131747_2$
$\varphi_{4,0} = 2451_1$	$\varphi_{12,0} = 145275_1$
$\varphi_{4,1} = 2451_2$	$\varphi_{12,1} = 145275_2$
$\varphi_{5,0} = 6326_1$	$\varphi_{13,0} = 170258_1$
$\varphi_{5,1} = 6326_2$	$\varphi_{13,1} = 170258_2$
$\varphi_{6,0} = 8152_1$	$\varphi_{14,0} = 335293_1$
$\varphi_{6,1} = 8152_2$	$\varphi_{14,1} = 335293_2$
$\varphi_{7,0} = 9271_1$	$\varphi_{15,0} = 638571_1$
$\varphi_{7,1} = 9271_2$	$\varphi_{15,1} = 638571_2$
$\varphi_{8,0} = 54473_1$	$\varphi_{19,0} = 784379_1$
$\varphi_{8,1} = 54473_2$	$\varphi_{19,1} = 784379_2$

Block 2:	$\varphi_{16,0}$	$\varphi_{20,1}$	$\varphi_{22,1}$	$\varphi_{23,0}$
$653125_1 = \chi_{24,0}$	1	.	.	.
$2784375_1 = \chi_{43,0}$	1	1	.	.
$3200000_1 = \chi_{45,0}$	.	.	.	1
$4809375_2 = \chi_{50,1}$	.	1	1	.
$5878125_2 = \chi_{54,1}$	.	.	1	1

$$\begin{aligned} \varphi_{16,0} &= 653125_1 \\ \varphi_{20,1} &= 2131250_2 \\ \varphi_{22,1} &= 2678125_2 \\ \varphi_{23,0} &= 3200000_1 \end{aligned}$$

Block 3:	$\varphi_{16,1}$	$\varphi_{20,0}$	$\varphi_{22,0}$	$\varphi_{23,1}$
$653125_2 = \chi_{24,1}$	1	.	.	.
$2784375_2 = \chi_{43,1}$	1	1	.	.
$3200000_2 = \chi_{45,1}$	.	.	.	1
$4809375_1 = \chi_{50,0}$	.	1	1	.
$5878125_1 = \chi_{54,0}$	.	.	1	1

$$\begin{aligned} \varphi_{16,1} &= 653125_2 \\ \varphi_{20,0} &= 2131250_1 \\ \varphi_{22,0} &= 2678125_1 \\ \varphi_{23,1} &= 3200000_2 \end{aligned}$$