

NORTHWESTERN UNIVERSITY  
PROJECT NAME \_\_\_\_\_  
JOB # \_\_\_\_\_

FOR: \_\_\_\_\_  
ISSUED: 11/06/2017



NORTHWESTERN UNIVERSITY

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JOB # \_\_\_\_\_

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0# A. .\$/0,+ S697 '22%- (679,\$

0# S6. .-',,\$ / S694/ (2\$%42/\$ N%7 ,

0'# S6. .-',,\$ / S694/ (2\$%42/\$ C/(2%42 P,\$\*/( (%(+ .3/ ( , (679,\$

1# = INFORMATIONAL SUBMITTALS

A# G6%-1'4%2' / ( D%2%: F/\$ I (\*2%--,\$ % (+ A\$43'2,426\$%- H%\$+&%\$, C/ (\*6-2%(2#

B# P\$//1 /1 C,\$2'1'4%2'/( : P\$/0'+, 4/ .8 /1 7%(61%426\$,\$\*H'D /11'4%- 4,\$2'1'4%2'/( /\$ %44\$,+2%2'/( +/467 ,(2 '(+4%2'() .\$///1 /1 \*2%26\* %\* % A6%-1',+ % (+ %623/\$'@,+ .\$/0'+,\$ /1 23, .\$/7%\$8 I(2,)\$%2,+ W', )%(+ A44, \*\* C/(2\$/- P\$/+642\*#

C# P\$/+642 T, \*2 R, ./2\*: F/\$ 4/7 .-%(4, &'23 %44, \*\*'9'-28 \$,A6'\$, 7,(2\*5 9%\*, + / ( , 0%-6%2'/( /1 4/7 .\$/3, (\*'0, 2,\*2\* .,\$1/\$7,+ 98 7%(61%426\$,\$% (+ &'2( , \*\*, + 98 % A6%-1', + 2,\*2'() %), (485 1/\$ +//\$ 3%\$+&%\$, / ( +//\$\* -/4%2,+ '( %44, \*\*'9-, \$/62, \*#

1# C/7 .-%(4, &'23 I-'(/' \* A44, \*\*'9'-28 C/+, S&'() D//\$ O., ('() F/\$4, : P\$/0'+, % (/2%\$'@,+ C,\$2'1'4%2, /1 IAC C/7 .-%(2 D//\$ O., ('() F/\$4, /1 %-- \* &'() % (+ \*-'') +//\$\*# T3, 4,\$2'1'4%2, 7 6\*2 -'2 %-- +//\$ (679,\$\*5 \$//7 (%7 , \*5 %(+ 7, %\*6\$,+ +//\$ /., ('() 1/\$4, /1 ,%43 +//\$#

D# W%\$\$(28: S., 4'%- &%\$\$(28 \* ., 4'1', + '( 23\* S, 42'/(#

1# > C"OSEOUT SUBMITTALS

A# M%'(2, (%(4, D%2%: F/\$ ,%43 28., /1 +//\$ 3%\$+&%\$, 2/ '(4-6+, '( 7%'(2, (%(4, 7%(6%-\*# I(4-6+, 1'(%- 3%\$+&%\$, #

1# 6 GUA"NTY ASSURANCE

A# I(\*2%--, \$ G6%-1'4%2' / (\*: I(\*2%--, \$\*5 2\$%'(+ 98 23, .\$/7%\$8 .\$/+642 7%(61%426\$,\$\*5 &'23 % 7('7 67 : 8, %\$\* +/467 ,(2, + ,< .,\$', (4, '( \*2%--'() 9/23 \*2%(+)%+ % (+ , - , 42\$'1', + 96'-+, \$\* 3%\$+&%\$, \*'7 '-%\$ '( 7 %2, \$'0-5 +, \*) (5 % (+ , < 2, (2 / 23%2 '(+4%2, + 1/\$ 23\*' P\$/B, 42 % (+ &'3/\*, &/? 3%\* \$, \*6-2,+ '( 4/ (\*2\$642' / (&'23 % \$, 4/\$+ /1 \*644, \*\*'16-'( \*, \$0'4, ., \$1/\$7 % (4, #

B# M%(61%426\$,\$\* G6%-1'4%2' / (\*: E()%), A6%-1', + 7%(61%426\$,\$\* &'23 % 7('7 67 > 8, %\$\* /1 +/467 ,(2, + ,< .,\$', (4, '( .\$/+64'() 3%\$+&%\$, % (+ , A6'. 7, (2 \*'7 '-%\$ 2/ 23%2 '(+4%2, + 1/\$ 23\*' .\$/B, 42 % (+ 23%2 3%0, % .\$/0, ( \$, 4/\$+ /1 \*644, \*\*'16-'( \*, \$0'4, ., \$1/\$7 % (4, #

C# D//\$ H%\$+&%\$, S6. .-',,\$ G6%-1'4%2' / (\*: E< .,\$', (4. 713207 (\$) -5.00129(\*) -7 .7 .7 .7 .7 .7 .7 .7 .7 .07 (2)0.312

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- E# S/6\$4, " '7'2%2' / (\*: O92%' ( , %43 28. , /1 +// \$ 3%\$+&%\$, 1\$/ 7 % \*' ( )-, 7% (61%426\$, \$ #
  - 1# P\$/0+, , -, 42\$'1', + +// \$ 3%\$+&%\$, 1\$/ 7 \*%7 , 7% (61%426\$, \$ \*% 7, 43% ('4%- +// \$ 3%\$+&%\$, 5 6(-, \*\* /23, \$&'\*, '(+ '4%2, + # M% (61%426\$, \$\* 23%2 ., \$1/\$7 , -, 42\$'4%- 7 /+ '1'4%2' / ( \* % (+ 23%2 %\$, - '2, + 98 % 2, \*2' ( ) % (+ ' ( \* ., 42' ( ) %), (48 %44, .2%9-, 2/ %623/\$'2', \* 3%0' ( ) B6\$' \*+42' / ( %\$, %44, .2%9-, #
  - 2# P\$/0+, , -, 42\$ / 7, 43% ('4%- +// \$ 3%\$+&%\$, 1\$/ 7 23, \*%7 , 7% (61%426\$, \$ \*% 7, 43% ('4%- +// \$ 3%\$+&%\$, 5 6(-, \*\* /23, \$&'\*, '(+ '4%2, + #
  
- F# F'\$, R%2, + D// \$ A\*\* , 79-' , \*: W3, \$, 1\$, \$%2, + +// \$ %\*\* , 79-' , \* %\$, '(+ '4%2, +5 . \$/0'+, +// \$ 3%\$+&%\$, \$%2, + 1/\$ 6\* , '( %\*\* , 79-' , \* 4/7 .8' ( ) &'23 NFPA 80 23%2 %\$, - '2, + % (+ -%9, -, + 98 % A6%- '1', + 2, \*2' ( ) %), (485 1/\$ 1'\$, . \$/2, 42' / ( \$%2' ( ) \* '(+ '4%2, +5 9%\* , + / ( 2, \*2' ( ) %2 . / \*'2'0, . \$, \*\*6\$, %44/\$+ ' ( ) 2/ NFPA 2>2 / \$ U" 10C5 6(-, \*\* /23, \$&'\*, '(+ '4%2, + #
  
- !# S7 / ? , % (+ D\$%12 C / (2\$ / - D// \$ A\*\* , 79-' , \*: W3, \$, \* 7 / ? , % (+ +\$%12 4 / (2\$ / - +// \$ %\*\* , 79-' , \* %\$, \$, A6'\$, +5 . \$/0'+, +// \$ 3%\$+&%\$, 23%2 7 , 2 \$, A6'\$, 7 , (2\* /1 %\*\* , 79-' , \* 2, \*2, + %44/\$+ ' ( ) 2/ U" 178= % (+ ' (\*2%-- , + ' ( 4 / 7 .-' % (4, &'23 NFPA 10>#
  - 1# A' \$ " , %?%) , R%2, : M% < '7 67 %\$ - , %?%) , /10#: 417 / \*A# 12# H: 46# 7 . , \$ 7' (62, / \*A# 7D %2 23, 2, \*2, + . \$, \*\*6\$, + '11, \$, (2%- /1 0#: ' (43 & ) H7> P% D /1 &%2, \$ #
  
- H# E-, 42\$'1', + D// \$ H%\$+&%\$, : " '2, + % (+ -%9, -, + %\* +, ' ( , + ' ( NFPA 705 A\$2'4-, 1005 98 % 2, \*2' ( ) %), (48 %44, .2%9-, 2/ %623/\$'2', \* 3%0' ( ) B6\$' \*+42' / ( #
  
- I# M, % ( \* /1 E) \$, \*\* D// \$\*: "%243, \* + / ( /2 \$, A6'\$, 7 / \$, 23% ( 1 > -91 H67 ND 2 / \$, -, %\* , 23, -%243# " /4? \* + / ( /2 \$, A6'\$, 6\* , /1 % ? , 85 2 / /5 / \$ \* . , 4%- ? ( / &- , +), 1 / \$ / . , \$%2' / ( #
  
- J# A44, \*\* '9-' 28 R, A6'\$, 7 , (2\*: C / 7 .8 &'23 % . - '4%9-, . \$/0' \*' / ( \* ' ( 23, DOJ: \* 2010 ADA S2% (+ %\$+ \* 1/\$ A44, \*\* '9-, D, \*') ( 23, ABA S2% (+ %\$+ \* /1 23, F, +, \$%- %), (48 3%0' ( ) B6\$' \*+42' / ( % (+ ICC A117#1 1/\$ +// \$ 3%\$+&%\$, / ( +// \$ \* ' ( % ( %44, \*\* '9-, \$ /62, #
  - 1# P\$/0+, / . , \$%2' ( ) +, 0'4, \* 23%2 + / ( /2 \$, A6'\$, 2' ) 32 ) \$%\* . ' ( ) 5 . ' (43' ( ) 5 / \$ 2&'2' ( ) /1 23, &'2 % (+ 23%2 / . , \$%2, &'23 % 1/\$4, /1 ( /2 7 / \$, 23% ( > -91 H22#2 ND#
  - 2# C / 7 .8 &'23 23, 1 / - / &' ( ) 7 % < '7 67 / . , ( ' ( ) 1 / \$4, \$, A6'\$, 7 , (2\* :
    - %# 1 (2, \$ / \$5 N / ( F'\$, R%2, + H' ( ) , + D// \$\*: > -91 H22#2 ND % . - . ' , + . , \$ . , (+46-%\$ 2 / +// \$ #
    - 9# S-' + ' ( ) / \$ F / - + ' ( ) D// \$\*: > -91 H22#2 ND % . - . ' , + . %\$%-- , - 2 / +// \$ %2 -%243#
    - 4# F'\$, D// \$\*: M' ( '7 67 / . , ( ' ( ) 1 / \$4, %-- / &%9-, 98 %623/\$'2', \* 3%0' ( ) B6\$' \*+42' / ( #
  
- :# B, 0, - \$%\* , + 23\$, \*3 / - \* &'23 % \* - / . , /1 ( /2 7 / \$, 23% ( 1:2# P\$/0'+, 23\$, \*3 / - \* ( /2 7 / \$, 23% ( 1/2 ' (43 H1: 7 7 D 3' ) 3#
- =# C- / \* , \$\*: A + B6\*2 +// \$ % ( + ) %2, 4- / \* , \$ \* & , , . . \$, / + \* \* / 23%25 1\$ / 7 % ( / . , ( . / \*'2' / ( /1 10 +, ) \$, , \*5 23, 2' 7 , \$, A6'\$, + 2 / 7 / 0, 23, +// \$ 2 / % . / \*'2' / ( /1 12 +, ) \$, , \* 1\$ / 7 23, -%243 ' \* > \* , 4 / ( + \* 7' ( '7 67 #
  
- E# P\$, S697 '22%- C / (1, \$, (4, : C / (+642 4 / / \$ + ' (%2' / ( 4 / (1, \$, (4, ' ( 4 / 7 .-' % (4, &'23 \$, A6'\$, 7 , (2\* ' ( D'0' \*' / ( 01 S, 42' / ( ; P\$/B, 42 M, , 2' ( ) \*; &'23 %22, (+ % (4, 98 \$, . \$, \* , (2%2'0, \* /1 S6 . - . ' , \$H\* D5 I ( \*2%-- , \$H\* D5 % ( + C / (2\$%42 / \$H\* D 2 / \$, 0', & . \$ / . , \$ 7, 23 / + \* % ( + . \$ / 4, +6\$, \* 1 / \$ \$, 4, '0' ( ) 5 3% ( + ' ( ) 5 % ( + ' (\*2%-- ' ( ) +// \$ 3%\$+&%\$, #
  - 1# P\$ / \$ 2 / ' (\*2%-- %2' / ( /1 +// \$ 3%\$+&%\$, 5 %\$ \$ % ( ) , 1 / \$ 7 % (61%426\$, \$ \* \$ , . \$, \* , (2%2'0, \* 2 / 3 / - + % . \$ / B, 42 \* . , 4'1'4 2\$% ' ( ' ) 7 , , 2' ( ) 2 / ' (\*2\$642 23, ' (\*2%-- ' ( ) 4 / (2\$%42 / \$ \* C . , \$ \* / ( ( , - / ( 23, . \$ / . , \$ ' (\*2%-- %2' / ( % ( + % + B6\*2 7 , (2 /1 23, ' \$ \$ , \* . , 42'0, . \$ / + 642 \* # P\$ / + 642 2\$% ' ( ' ) 2 / 9, %22, ( +, + 98 ' (\*2%-- , \$ \* /1 +// \$ 3%\$+&%\$, H' (4-6+ ' ( ) , -, 42\$ / 7, 43% ('4%- 3%\$+&%\$, D 1 / \$

2# 1( \* . , 42 % ( + + ' \* 46 \* \* , - , 42 \$ 4 % - \$ / 6 ) 3 ' ( ) ' ( 5 . / & , \$ \* 6 . - 8 4 / ( ( , 42 ' / ( \* 5 % ( + / 23 , \$ . \$ , . % \$ % 2 / \$ 8 & / \$ ? . , \$ 1 / \$ 7 , + 98 / 23 , \$ 2 \$ % + , \* #

:# R , 0 ' , & \* , A6 , ( 4 , / 1 / . , \$ % 2 ' / ( ( % \$ \$ % 2 ' 0 , \* 1 / \$ , % 43 6 ( ' A6 , % 44 , \* \* 4 / ( 2 \$ / - , + / . , ( ' ( ) #

=# R , 0 ' , & % ( + 1 ' ( % - ' @ , 4 / ( \* 2 \$ 6 4 2 ' / ( \* 43 , + 6 - , % ( + 0 , \$ ' 18 % 0 % ' - % 9 ' - 28 / 1 7 % 2 , \$ ' % - \* #

># R , 0 ' , & 23 , \$ , A6 \$ , + ' ( \* . , 42 ' ) 5 2 , \* 2 ' ( ) 5 4 / 7 7 ' \* \* ' / ( ' ( ) 5 % ( + + , 7 / ( \* 2 \$ % 2 ' / ( . \$ / 4 , + 6 \$ , \* #

1#7 DE "IVERY5 STORA ! E5 AND HAND"IN !

A# I ( 0 , ( 2 / \$ 8 + / / \$ 3 % \$ + & % \$ , / ( \$ , 4 , ' . 2 % ( + . \$ / 0 ' + , \* , 46 \$ , - / 4 ? 6 . 1 / \$ + / / \$ 3 % \$ + & % \$ , + , - 0 , \$ , + 2 / P \$ / B , 42 \* 2 , # D / ( / 2 \* 2 / \$ , - , 42 \$ / ( ' 4 % 44 , \* \* 4 / ( 2 \$ / - 3 % \$ + & % \$ , 5 \* / 12 & % \$ , / \$ % 44 , \* \* / \$ ' , \* % 2 P \$ / B , 42 \* 2 , & 23 / 62 . \$ / \$ % 6 2 3 / \$ @ % 2 ' / ( #

B# R , 4 , ' 0 , O & ( , \$ . \$ / 0 ' + , + 48 - ' ( + , \$ \* 5 % ( + . \$ / 0 ' + , % \* , 46 \$ , - / 4 ? 6 . 1 / \$ 48 - ' ( + , \$ \* + , - 0 , \$ , + 2 / 23 , P \$ / B , 42 \* 2 , #

C# T % ) , % 43 ' 2 , 7 / \$ . % 4 ? % ) , \* , . % \$ % 2 , - 8 & 23 ' + , ( 2 ' 1 ' 4 % 2 ' / ( 4 / / \$ + ' ( % 2 , + & 23 23 , 1 ' ( % - + / / \$ 3 % \$ + & % \$ , \* 43 , + 6 - , 5 % ( + ' ( 4 - 6 + , ' ( \* 2 % - - % 2 ' / ( ' ( \* 2 \$ 6 4 2 ' / ( \* 5 2 , 7 . - % 2 , \* 5 % ( + ( , 4 , \* \* % \$ 8 1 % \* 2 , ( , \$ \* & 23 , % 43 ' 2 , 7 / \$ . % 4 ? % ) , #

D# D , - 0 , \$ 5 % \* % . - 4 % 9 - , % - 7 % ( 6 1 % 4 2 6 \$ , \* 6 . - . ' , + 5 . , \$ 7 % ( , ( 2 ? , 8 \* 5 % 44 , \* \* 4 / ( 2 \$ / - 4 \$ , + , ( 2 ' % - \* 5 \* / 12 & % \$ , % ( + \$ , - % 2 , + % 44 , \* \* / \$ ' , \* + \$ , 42 - 8 2 / O & ( , \$ 0 ' % ' ( . , \$ \* / ( + , - 0 , \$ 85 \$ , ) ' \* 2 , \$ , + 7 % ' - / \$ / 0 , \$ ( ' ) 3 2 . % 4 ? % ) , \* , \$ 0 ' 4 , #

1#8 COORDINATION

A# C / / \$ + ' ( % 2 , - % 8 / 6 2 % ( + ' ( \* 2 % - - % 2 ' / ( / 1 1 - / / \$ \$ , 4 , \* \* , + + / / \$ 3 % \$ + & % \$ , & 23 1 - / / \$ 4 / ( \* 2 \$ 6 4 2 ' / ( # C % \* 2 % ( 4 3 / \$ ' ) ' ( \* , \$ 2 \* ' ( 2 / 4 / ( 4 \$ , 2 , #

B# I ( \* 2 % - - % 2 ' / ( T , 7 . - % 2 , \* : D ' \* 2 \$ ' 9 6 2 , 1 / \$ + / / \$ \* 5 1 \$ % 7 , \* 5 % ( + / 23 , \$ & / \$ ? \* . , 4 ' 1 , + 2 / 9 , 1 % 4 2 / \$ 8 . \$ , . % \$ , + # C 3 , 4 ? S 3 / . D \$ % & ' ) \* / 1 / 23 , \$ & / \$ ? 2 / 4 / ( 1 ' \$ 7 23 % 2 % + , A 6 % 2 , . \$ / 0 ' \* ' / ( \* % \$ , 7 % + , 1 / \$ - / 4 % 2 ' ( ) % ( + ' ( \* 2 % - - ' ) + / / \$ 3 % \$ + & % \$ , 2 / 4 / 7 . - 8 & 23 ' ( + 4 % 2 , + \$ , A 6 \$ , 7 , ( 2 \* #

C# S , 46 \$ 28 : C / / \$ + ' ( % 2 , ' ( \* 2 % - - % 2 ' / ( / 1 + / / \$ 3 % \$ + & % \$ , 5 ? , 8 ' ( ) 5 % ( + % 44 , \* \* 4 / ( 2 \$ / - & 23 O & ( , \$ \* \* , 46 \$ 28 4 / ( \* 6 - 2 % ( 2 #

D# O & ( , \$ P \$ / 0 ' + , + " / 4 ? C 8 - ' ( + , \$ \* :

1# C / / \$ + ' ( % 2 , + / / \$ 3 % \$ + & % \$ , \* 6 9 7 ' 22 % - 2 / % - / & 1 / \$ O & ( , \$ % 4 2 ' 0 ' 2 ' , \* / 1 , \* 2 % 9 - ' 3 ' ( ) % ? , 8 ' ( ) \* 43 , + 6 - , 5 . \$ / 4 6 \$ ' ( ) 23 , 48 - ' ( + , \$ \* 5 . ' ( ( ' ) 23 , 48 - ' ( + , \$ \* 5 % ( + 4 6 2 2 ' ( ) % ( + + \* 2 \$ ' 9 6 2 ' ( ) 23 , ? , 8 \* #

2# C / / \$ + ' ( % 2 , \$ , 4 , ' . 2 % ( + ' ( \* 2 % - - % 2 ' / ( / 1 23 , O & ( , \$ . \$ / 0 ' + , + - / 4 ? 48 - ' ( + , \$ \* \* / 23 % 2 4 / ( \* 2 \$ 6 4 2 ' / ( % 4 2 ' 0 ' 2 ' , \* \$ , 7 % ' ( / ( \* 43 , + 6 - , #

E# E - , 42 \$ 4 % - S 8 \* 2 , 7 R / 6 ) 3 ' ( ) I : C / / \$ + ' ( % 2 , - % 8 / 6 2 % ( + ' ( \* 2 % - - % 2 ' / ( / 1 , - , 42 \$ 1 ' , + + / / \$ 3 % \$ + & % \$ , & 23 4 / ( ( , 42 ' / ( \* 2 / . / & , \$ \* 6 . - . ' , \* % ( + 9 6 - + ' ( ) \* % 1 , 28 % ( + \* , 46 \$ 28 \* 8 \* 2 , 7 \* #

F# E < ' \* 2 ' ( ) O . , ( ' ( ) \* : W 3 , \$ , 3 % \$ + & % \$ , 4 / 7 . / ( , ( 2 \* % \$ , \* 43 , + 6 - , + 1 / \$ % . - 4 % 2 ' / ( 2 / , < ' \* 2 ' ( ) 4 / ( \* 2 \$ 6 4 2 ' / ( / \$ & 3 , \$ , 7 / + ' 1 ' 4 % 2 ' / ( \* 2 / , < ' \* 2 ' ( ) + / / \$ 3 % \$ + & % \$ , % \$ , \$ , A 6 \$ , + 5 1 ' , + 0 , \$ 18 , < ' \* 2 ' ( ) 4 / ( + 2 ' / ( \* % ( + 4 / / \$ + ' ( % 2 , ' ( \* 2 % - - % 2 ' / ( / 1 + / / \$ 3 % \$ + & % \$ , 2 / \* 6 ' 2 / . , ( ' ( ) 4 / ( + 2 ' / ( \* % ( + 2 / . \$ / 0 ' + , . \$ / . , \$ + / / \$ / . , \$ % 2 ' / ( #

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1#I WARRANTY

A# S. , 4'%- W%\$\$\$(28: M%(61%426\$, \$0\* \*2%(+%\$+ 1/\$7 '( &3'43 7%(61%426\$, \$%)\$, , \* 2/ \$, . %\$ /\$ \$, .-%4, 4/7 . / (, (2\* /1 +// \$ 3%\$+&%\$, 23%2 1%- '( 7%2, \$%-\* /\$ &/ \$? 7% (\*3'. &'23' ( \* . , 4'1', + &%\$\$\$(28 . , \$' / + #

1# F%-6\$, \* '(4-6+, 5 962 %\$, ( /2 -'7'2, + 2/5 23, 1/-- /&' ( ):

%# S2\$6426\$%- 1%-6\$, \* '(4-6+' ( ) , <4, \*\*'0, +, 1-, 42' / (5 4\$%4?' ( ) 5 / \$ 9\$, %?%) , #

9# F%6-28 / . , \$%2' / ( /1 +// \$\* % ( + +// \$ 3%\$+&%\$, #

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1# N%7 , + M%(61%426\$, \$\*∩ P\$/ +642\*: M%(61%426\$, \$% (+ .\$/ +642 +, \*) (%2' / ( %\$, -'2, + 1/\$ , %43  
+// \$ 3%\$+&%\$, 28. , \$, A6'\$, + 1/\$ 23, .6\$. / \* , /1 , \*2%9-'\*3'() 7'('767 \$, A6'\$, 7 , (2\*#  
M%(61%426\$, \$\*∩ (%7 , \* %\$, %99\$, 0'2, + '( P%\$2 : ;D / / \$ H%\$+&%\$, S43, +6-, ; A\$2'4-, #

2#2 HIN ! ES

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-%9, -, +5-, %+-(, +%(\$,) 6-%\$+//\$\*# P\$/0'+, '(+, ., (+, (2%(+%+86\*2%9-, 0%-0, \* 1/\$4-/\*') \* ., , +5  
-%243 \* ., , +5%(+9%4?43, 4? &'23 96'-2 '(+, %+ \*2/. %(+3/-+ / ., (1, %26\$, \* %\* \* ., 4'1', +# P\$/0'+, +  
1'(\*3 4/0, \$ .-%2, \* /\$ 23\$, \*3/-+ \* %\* '(+4%2, +' (+// \$ H%\$+&%\$, S, 2\*#

1# M%(61%426\$, \$\*: S69B, 42 2/ 4/7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 23,  
1/--/&'():

%# R'</ ( D// \$ C/ (2\$/- \*#

B# P'0/2\*: BHMA A1>6#5 ! \$%+, 15 4, \$2'1', + . '0/2\* . \$/0'+, + , '23, \$ 4, (2, \$ 36() /\$ := '(43 /11\*, 228. ,  
4/7 .-, 2, &'23 2/ .5 9/22/75 %(+'(2, \$ 7, +%2, . '0/2\* H/11\*, 2 . '0/2\* /(-8D '( A6%(2'28 %44/\$+'() 2/  
7%(61%426\$, \$\* \$, 4/7 7, (+%2'/( \*# S. %4, '(2, \$ 7, +%2, . '0/2\* , A6%-8 (/2-, \* 23%( 2> '(43, \* /(  
4, (2, \$ .-%\$2 /\$ (/2 7/\$, 23%( :> '(43, \* / (4, (2, \$ 1/\$ +//\$\* /0, \$ 121 '(43, \* 3') 3# P'0/2 3'(), \* 2/  
3%0, /'- '7 . \$, ) (%2, + 9\$/( @, 9, %\$'() '( 23, 2/ . '0/2 %(+ % \$%+%- \$/--, \$ %(+ 23\$6\*2 9, %\$'() '( 23,  
9/22/7 . '0/2 &'23 23, 9/22/7 . '0/2 +, \*) (+, 2/ 4%\$\$8 23, 16- &', ) 32 /1 23, +//\$# P'0/2\* 2/ 9, U"  
-'\*2, + 1/\$ &'(+\*2/\$ 7 &3, \$, % . .-'4%9-, #

1# M%(61%426\$, \$\*: S69B, 42 2/ 4/7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 23,  
1/--/&'():

%# R'</ ( D// \$ C/ (2\$/- \*#

2# = CONTINUOUS HIN ! ES



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2#> POWER TRANSFER DEVICES

A# E-,42\$'1',+ G6'4? C/((,42 T\$%(\*1,\$ H'()),\*: P\$/0'+, ,-,42\$'1',+ 2\$%(\*1,\$ 3'()),\* &'23 M/-,<

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&'\$( ) 3%\$( , \*\* , \* 1/\$ 4/ ( ( , 42' / ( 2/ , - , 42\$'4 -/4?' ( ) + , 0'4 , \* % ( + . / & , \$ \* 6 . . - ' , \* # P\$ / 0' + , \* 611'4' , ( 2  
( 6 7 9 , \$ / 1 4 / ( 4 , % - , + &' \$ , \* 2 / % 44 / 7 7 / + % 2 , , - , 42\$'4 16 ( 42' / ( / 1 \* . , 4'1' , + 3% \$ + & % \$ , # P\$ / 0' + , %  
4 / ( ( , 42 / \$ 1 / \$ 23 \$ / 6 ) 3 + / / \$ , - , 42\$' / ( ' 4 - / 4 ? ' ( ) + , 0'4 , \* % ( + 1 \$ / 7 3 ' ( ) , 2 / 86 ( 42' / ( 9 / < % 9 / 0 , 23 ,  
/ . , ( ' ( ) # W' \$ , ( 6 2 4 / ( ( , 42' / ( \* % \$ , ( / 2 % 44 , . 2 % 9 - , # D , 2 , \$ 7 ' ( , 23 , - , ( ) 23 \$ , A 6 \$ , + 1 / \$ , % 43  
, - , 42\$'1' , + 3% \$ + & % \$ , 4 / 7 . / ( , ( 2 1 / \$ 23 , + / / \$ 28 . , 5 \* ' @ , % ( + 4 / ( \* 2 \$ 6 4 2' / ( 5 7 ' ( ' 7 6 7 / 1 2 & / . , \$

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'(43 9%4?\*,25 1/2 '(43 23\$/ & -%2439/-2 H: /= '(43 %2 \$%2,+ .%'\$,+ / . , (' ) \*D5 % (+ 6('0,\$\*%- ( / ( 3%(+,+#

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&'():

%# S%\$), (2 M%(61%426\$'() 11 "'(.

D# "/4? T\$'7 D, \*) (: "N"5 "NJ#

E# E(6\$-'(): W3,\$, \* . , 4'1', + .\$/0'+, ?(6\$-'() / \$ %9\$%\*0, 4/%2'() 2/ %-- , 0,\$\* / ( +//\$\* -, %+'() 2/ 3%@\$%+/6\* %\$, %\* \*643 %\* 7, 43%('4%- \$//7 \*5 9/!-, \$ %(+ 16\$(%4, \$//7 \*5 B%( '2/\$ 4-/\*, 2\*5 %(+ %\* /23, \$&'\*, \$, A6'\$, + 98 23, I-'(/ '\* A44, \*\*'9'-28 C/+ , #

2#7 "OCE AND "ATCH STRIEES

A# S2\$'? , \*: P\$/0'+, 7%(61%426\$, \$\* \*2%(+@\$+ \*2\$'? , 1/\$ , %43 -/4? 9/-2 /\$ -%2439/-2 4/7 .-8'() &'23 \$, A6'\$, 7, (2\* '(+4%2, + 1/\$ % . -'4%9-, -/4? /\$ -%243 %(+ &'23 \*2\$'? , 9/< %(+ 46\$0, + -' . , <2, (+, + 2/ .\$/2, 42 1\$%7 , J 1'(' \*3, + 2/ 7%243 -/4? /\$ -%243#

1# F-%2 "' . S2\$'? , \*: F/\$ -/4?\* &'23 23\$, , .', 4, %(2'1\$'42' / ( -%2439/-2\*5 %\* \$, 4/7 7, (+, + 98 7%(61%426\$, \$#

2# E<2\$% "/() "' . S2\$'? , \*: F/\$ -/4?\* 6\* , + / ( 1\$%7 , \* &'23 % . -' , + &' / + 4%\*'() ) 2\$'7#

:# A-67'(67 F\$%7 , S2\$'? , B/<: M%(61%426\$, \$\* \* . , 4%- \*2\$'? , 9/< 1%9\$'4%2, + 1/\$ %-67'(67 1\$%7'()#

B# S2%(+@\$+\*: C/7 .-8 &'23 23, 1/--/&'():

1# S2\$'? , \* 1/\$ M/\$2'\*, "/4?\* %(+ "%243, \*: BHMA A1>6#1 :#

2# S2\$'? , \* 1/\$ B/\$, + "/4?\* %(+ "%243, \*: BHMA A1>6#2#

:# S2\$'? , \* 1/\$ A6<'-%\$8 D, %+-/4?\*: BHMA A1>6#>#

=# D6\*2. \$/ /1 S2\$'? , \*: BHMA A1>6#16#

C# P6\*3 P6-- "%243, \*: M/\$2'\*, 5 BHMA A1>6#1: J S, \$', \* 10005 O. , \$%2' / (%- % (+ S, 46\$'28 ! \$%+, 1 7/\$2'\*, 28. , .6\*3 .6-- -/4?\* %(+ -%243, \* %(+ '-')%26\$, \$, \*\*'2%(2 .%++-, 2\$'7 4%.%9-, /1 9, '() 7/6(2, + '( 0, \$2'4%- H6. /\$ +/&(D %(+ 3/\$@/(2%- H\*'+, &%8\*D . / '\*2' / (\*# " /4?\* , 2\* 2/ 9, 7%(61%426\$, + &'23 % 4/\$\$/ \*' / ( \$, \*\*'2%(25 1/\$7 , + \*2, , - 4%\*, %(+ 9, ( / ( 3%(+ , +5 1', -+ \$, 0, \$\* '9-, 1/\$ \$, 3%(+'() &'23/62 +'\*\*\*, 7 9-8 /1 23, -/4? 9/+8# P%++-, \* %(+ 4/0, \$\* %\$, 7%(61%426\$, + 1/\$7 4%\*2 \*2%'(-, \*\* \*2, , - /\$ 9\$%\*\*\* 7%2, \$%# P\$/0'+, / .2' / (%- , %+ -'('() H-/4? 9/+8D %(+ T/\$ < 1%\*2, ( , \$\* %\* \* . , 4'1', + '( H%\$+&%\$, S, 2\*#

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&'():

%# S%\$), (2 M%(61%426\$'() 8200 A "P S, \$', \*#

2#8 AUKI" IARY "OCES

A# M/\$2'\*, A6<'-%\$8 "/4?\*: BHMA A1>6#>J ! \$%+, 15 4, \$2'1', + \*7%- 4%\*, 7/\$2'\*, 28. , +, %+-/4?\* 4/( \*2\$642, + /1 3, %08 )%6), &\$/6)32 4/\$\$/ \*' / ( \$, \*\*'2%(2 \*2, , # S2, , - /\$ \*2%'(-, \*\* \*2, , - 9/-2\* &'23 % 1 '(43 23\$/ & %(+ 3%\$+, ( , + \*2, , - \$/ --, \$ . '( \*# D, %+-/4?\* 2/ 9, .\$/+642\* /1 2(+

1# M(61%426\$, \$\*: S69\$, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&'( ):

%# S(\$), (2 M(61%426\$( ) =870 S, \$', \*#

2#1 E"ECTRIC STRIEES

A# E-, 42\$'4 S2\$?', \*: BHMA A1>6#: 1J ! \$%+, 15 U" -' \*2, + 1/\$ 9/23 B6\$)-%\$8 R, \*'2%(4, %(+ 1/\$ 6\*, / ( 1'\$, \$%2, + +// \$ %\*\* , 79-', \*# S2%(-, \*\* \*2, -, 4/ (\*2\$642' / ( &'23 +6%- '(2, \$-/4?'( ) .-6( ) , \$ +, \*) ( 2, \*2, + 2/ , <4, , + : 000 -9\*# /1 \*2%2'4 \*2\$, ( ) 23 % (+ :>0 12 -9\*# /1 +8(% 7'4 \*2\$, ( ) 23# S2\$'? , \* 2, \*2, + 1/\$ % 7' ('767 1 7'--/ ( / . , \$%2' ( ) 484-, \*# P\$/0'+, \*2\$'? , \* &'23 12 / \$ 2= VDC 4% .%9'-28 % ( \*6. .-' , + \*2% (+%\$+ %\* 1%'- \* , 46\$, 6(-, \*\* /23, \$&'\* , \* . , 4'1' , +# O.2' / ( %0%'-%9-, 1/\$ -%2439/-2 % (+ -%2439/-2 \*2\$'? , 7 / (2/\$' ( ) '(+4%2' ( ) 9/23 23, . / \*'2' / ( /1 23, -%2439/-2 % (+ -/4? , + 4 / (+2' / ( /1 23, \*2\$'? , #

1# M(61%426\$, \$\*: S69\$, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&'( ):

%# F/-) , \$ A+%7 EDC 700 S, \$', \*#

9# HES 1006 S, \$', \*#

B# S6\$1%4, M/6(2, + R'7 E-, 42\$'4 S2\$?', \*: S6\$1%4, 7 / 6(2, + \$'7 , <'2 + , 0'4 , , -, 42\$'4 \*2\$'? , \* 4 / (1/\$ 7' ( ) 2/ ANSI/BHMA A1>6#: 15 ! \$%+, 15 % (+ U" -' \*2, + 1/\$ 9/23 B6\$)-%\$8 R, \*'2%(4, %(+ 1/\$ 6\*, / ( 1'\$, \$%2, + +// \$ %\*\* , 79-', \*# C / (\*2\$642' / ( '(4-6+, \* '(2, \$(-8 7 / 6(2, + \* / -, ( / + &'23 2& / 3, %08 +6285 \*2%(-, \*\* \*2, --/4?'( ) 7 , 43% ('\* 7 \* / . , \$%2' ( ) '(+ , . , ( + , (2-8 2/ . \$ / 0'+, 2% 7 . , \$ \$ , \*'2%(4, # S2\$'? , \* 2, \*2, + 1/\$ % 7' ('767 /1 >005000 / . , \$%2' ( ) 484-, \*# P\$/0'+, \*2\$'? , \* &'23 12 / \$ 2= VDC 4% .%9'-28 \*6. .-' , + \*2% (+%\$+ %\* 1%'- \* , 46\$, 6(-, \*\* /23, \$&'\* , \* . , 4'1' , +# O.2' / ( %0%'-%9-, 1/\$ -%2439/-2 % (+ -%2439/-2 \*2\$'? , 7 / (2/\$' ( ) '(+4%2' ( ) 9/23 23, . / \*'2' / ( /1 23, -%2439/-2 % (+ -/4? , + 4 / (+2' / ( /1 23, \*2\$'? , # S2\$'? , \$, A6'\$, \* ( / 4622' ( ) 2/ 23, %7 9 . \$' / \$ 2/ '( \*2%--%2' / ( #

1# M(61%426\$, \$\*: S69\$, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&'( ):

%# F/-) , \$ A+%7 #

9# HES 1>00/1600 S, \$', \*#

C# P\$/0'+, , -, 42\$'4 \*2\$'? , \* &'23 '( -( , . / & , \$ 4 / (2\$ / - , \$ %(+ \*6\$) , \*6. . \$ , \*\* / \$ 98 23, \*% 7 , 7 % (61%426\$, \$ %\* 23, \*2\$'? , &'23 4 / 7 9' ( , + . \$ / +642\* 3%0' ( ) 6(-'7'2, + -'1, 2'7 , & % \$ \$ % (28#

2#10 E"ECTROMA ! NETIC "OCES

A# S6\$1%4, E-, 42\$ / 7 % ) ( , 2'4 " / 4? \* HH, %08 D628D: BHMA A1>6#2: J ! \$%+, 1 &'23 7' ('767 3 / -+ ( ) 1 / \$4 , \*2\$, ( ) 23 / 1 15200 . / 6 (+ \*# " / 4? \* 2 / 9, 4% .%9-, / 1 , '23, \$ 12 / \$ 2= 0 / -2% ) , %(+ 9, U" -' \*2, + 1 / \$ 6\* , / ( 1'\$, \$%2, + +// \$ %\*\* , 79-', \*# E-, 42\$ / ('4\* %\$, 2 / 9, 16-8 \* , %-, + %) %' (\*2 2% 7 . , \$' ( ) % (+ %-- / & , <2, \$' / \$ & , %23, \$ . \$ / 1 % . .-'4%2' / (\*# A\* '(+42, + '( H%\$+&%\$, S, 2\*5 . \$ / 0'+, \* . , 4'1' , + 7 / 6(2' ( ) 9\$%4?, 2\* % (+ 3 / 6\* ( ) # P / & , \$ \*6. .-8 2 / 9, 23, \*% 7 , 7 % (61%426\$, \$ %\* 23, -/4? &'23 4 / 7 9' ( , + . \$ / +642\* 3%0' ( ) % -'1, 2'7 , \$ , .-%4, 7 , (2 & % \$ \$ % (28#

1# M(61%426\$, \$\*: S69\$, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&'( ):

%# S, 46\$'28 D / / \$ C / (2\$ / - \* EM" / 4? 1>00 S, \$', \*#

9# S, 46\$'2\$ / ( D / / \$ C / (2\$ / - \* M62 S, \$', \*#



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9# R/4?&/ /+ M%(61%426\$' )#

2#1= EKIT DEVICES AND AUKI" IARY ITEMS

A# ! , ( , \$%- R, A6'\$, 7 , (2\*: A- , <'2 + , 0'4 , \* \* . , 4'1' , + 3 , \$ , '( \*3%- 7 , , 2 /\$ , <4 , , + 23 , 1/--/&' ( )  
4\$'2 , \$' %:

1# A2 + / / \$\* ( /2 \$ , A6'\$' ( ) % 1'\$ , \$%2' ( ) 5 . \$ / 0'+ , + , 0'4 , \* 4 / 7 . -8' ( ) &'23 NFPA 101 % (+ -1\*2 , +  
% (+ -%9 , - , + 1 / \$ ; P% ('4 H%\$+&%\$ , ; %44 / \$+' ( ) 2 / U" : 0># P\$ / 0'+ , . \$ / . , \$ 1%\*2 , ( , \$\* %\*  
\$ , A6'\$ , + 98 7% (61%426\$ , \$ '(4-6+' ( ) \* , < (62\* % (+ 9 / -2\* %2 / . , ( ' ) \* \* . , 4'1' , + '( 23 ,  
H%\$+&%\$ , S , 2\*#

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DOOR HARDWARE

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FOR: \_\_\_\_\_  
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%. .-'4%9- , # P\$/0'+ , 23 , % . . \$/ . \$' %2 , 36\$\$'4% ( , / \$ 2/ \$ (%+ / \$ , '\*2% (2 . \$/ +642\* 23%2 3%0 , 9 , , ( ' (+ , . , (+ , (2 23'\$+ . % \$28 2 , \*2 , +5 4 , \$2'1' , +5 % (+ -%9 , - , + 2/ 7 , , 2 \*2%2 , % (+ -/4% - & ' (+ \*2/ \$7 96'+ ' ( ) 4/ + , \* % . .-'4%9- , 2/ . \$/ B , 42#



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:# O11\*, 2 .6- D, \*) (: M('7 1 '(43 \$/6(+ +%7 ,2, \$ \*2%'(-, \*\* \*2, , -9%\$ /\$ 269, \*2/4? .6--\* &'232  
1/2 '(43 .\$/B, 42' / ( %(+ /11\*, 2 /1 10 +, )\$, , \* 6(-, \*\* /23, \$&'\*, '(+'4%2, +#  
=# P6\*3 B%\$: M('7 1 '(43 \$/6(+ +%7 ,2, \$ 3/\$'@/(2%- .6\*3 9%\$\* &'23 7'('7 67 4-, %\$\$ (4, /1  
2 1/2 '(43 .\$/B, 42' / ( 1\$/7 1%4, /1 +// \$ 6(-, \*\* /23, \$&'\*, '(+'4%2, +#  
># F%\*2, (, \$\*: P\$/0'+, 7%43' (, \*4\$, &\* 1/\$ %-- 7 , 2%- +// \$\* H+'-- % (+ 2%. (/2 \*, -1 2% . .'()D % (+  
. \$/0'+, 7% (61%426\$, \*2% (+%\$+ 1/\$ %-- & // + + / / \$\*#  
6# M% (61%426\$, \$\*: S69B, 42 2/ 4/7 .-'(4, &'23 \$, A6'\$, 7 , (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23,  
1/--/&'() :  
  
%# R/4?& // + M% (61%426\$' ( )#  
9# M4E' ( ( , 8 P\$/+642\*#





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9# P, 7 ? / M% (61%426\$' ( ) HPED#

4# N, \$ / I (2, \$ (%2' / (%- HNED#

2#2> E " ELECTRONIC ACCESSORIES

A# E, 8 S&'243, \*: E, 8 \* &'243, \* 16\$ ('\*3, + \*2% (+%\$+ &'23 \*2%' (-, \*\* \*2, , - \*' (-, ) % ( ) 1%4, .-%2, &'23 % 12/2=VDC 9' 4/-/\$ "ED ' (+4%2/\$# I(2, )\$%- 9%4?' ( ) 9\$%4?, 2 . , \$7 '2\* ' (2, )\$%2' / ( &'23 % (8 1 1/=; /\$ 1 1/2; 7 /\$2\* , 28. , 48-' (+, \$# E, 8 \* &'243, \* %0%-9-, \*% 7 / 7 , (2%\$8 /\$ 7%' (2%' ( , + %42' / ( % (+ ' ( %\$\$/& 1%4, .-%2, / .2' / (\*#

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/ 7 .-% (4, &'23 \$, A6'\$, 7 , (2\*5 .\$/0'+, .\$/+642\* 98 / ( , /1 23, 1/--/&' ( ):

%# S, 46\$'28 D // \$ C / (2\$ /-\* HSDD 800 S, \$', \*#

9# S, 46\$'2\$ / ( D // \$ C / (2\$ /-\* HSUD ME S, \$', \*#

B# P6\*3 B622 / ( S&'243, \*: I (+6\*2\$%- )\$%+, 7 / 7 , (2%\$8 /\$ %-2, \$ (%2, 4 / (2%425 9%4? -') 32, + .6\*3 9622 / ( \* &'23 \*2%' (-, \*\* \*2, , - \* &'243 , (4-/\*6\$, \*# 12/2= VDC 9' 4/-/\$ -67' (%2' / ( \*6'2%9-, 1/\$ , '23, \$ 1-6\*3 /\$ \*6\$1%4, 7 / 6(2' ( )#

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/ 7 .-% (4, &'23 \$, A6'\$, 7 , (2\*5 .\$/0'+, .\$/+642\* 98 / ( , /1 23, 1/--/&' ( ):

%# S, 46\$'28 D // \$ C / (2\$ /-\* HSDD =00 S, \$', \*#

9# S, 46\$'2\$ / ( D // \$ C / (2\$ /-\* HSUD PB S, \$', \*#

C# R, A6, \*2 2/ E<2 M/2' / ( S, ( \* /\$: R, A6, \*2 2/ E<2 S, ( \* /\$\* 7 / 2' / ( +, 2, 42/\$\* \* . , 4'1'4%-8 +, \*' ) ( , +

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'(4-6+' ) -/4?/6(-/4?5 +//\$. / '\*2' / (5 % (+ \$, A6, \*2 2/ , <2 \*2%26\*# 12 /\$ 2=VDC 0/-2%), % +B6\*2%9-, / . , \$%2' ( ) % \* F%- S%1, /\$ F%- S, 46\$, #

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&' ( ):

%# S(\$), (2 M%(61%426\$ ( ) HSA D WT1 W', )%(+ T, \*2 U('2#

F# P/&,\$ S6. .-' , \*: P\$/0'+, N%2' / (%--8 R, 4/ ) ('@, + T, \*2' ( ) "%9/\$%2/\$8 "'\*2, + 12VDC /\$ 2=VDC H1', -+ \* , -, 42%9-, D 1'-2, \$, + % (+ \$, ) 6-%2, + . / &, \$ \*6. .-' , \*# I(4-6+, 9%22, \$8 9%4?6. / .2' / ( &'23 '(2, ) \$%- 9%22, \$8 43%\$)' ( ) 4% . %9'-28 ' ( %++'2' / ( 2/ / . , \$%2' ( ) 23, DC -/ % + ' ( , 0, (2 / 1 -' ( , 0/-2%), 1%'-6\$, # P\$/0'+, 23, -, %\*2 (6 7 9, \$ / 1 6('2\*5 %2 23, % . .\$/ . \$%2, % 7 . , \$%), -, 0, -5 \*611'4', (2 2/ , <4, , + 23, \$, A6'\$, + 2/2%- +\$%& 1/\$ 23, \* . , 4'1', + , -, 42\$'1', + 3%\$+&%\$, % (+ %44, \*\* 4/ (2\$/- , A6'. 7, (2#

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&' ( ):

%# S, 46\$'28 D // \$ C / (2\$/- \* HSDD 6:0 S, \$', \*#

9# S, 46\$'2\$/ ( D // \$ C / (2\$/- \* HSUD BPS 12/2= S, \$', \*#

2#26 S"IDIN! DOOR HARDWARE

A# S-'+' ( ) D // \$ H%\$+&%\$, : BHMA A1>6#1=J 4/ (\*'2' ( ) / 1 4/ 7 .-, 2, \* , 2\* '(4-6+' ( ) \$%-\*5 3% ( ) , \$\*5 \*6. . / \$2\*5 967 . , \$\*5 1- / \$ ) 6'+, \*5 % (+ %44, \*\* / \$', \* '(+4%2, + #

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&' ( ):

%# H%1, -, M%(61%426\$ ( ) #

9# P, 7 ? / M%(61%426\$ ( ) #

2# S-'+' ( ) B' P%\*\*\*' ( ) P/4?, 2 D // \$ H%\$+&%\$, : P\$/0'+, 4/ 7 .-, 2, \* , 2\* 4/ (\*'2' ( ) / 1 2\$%4?5 3% ( ) , \$\*5 \*2/ . \*5 967 . , \$\*5 1- / \$ 43% ( ( , -5 ) 6'+, \*5 % (+ %44, \*\* / \$', \* '(+4%2, + # :# P/4?, 2 S-'+' ( ) D // \$ H%\$+&%\$, : R%2, + 1/ \$ + / \$ \* &, ' ) 3' ( ) 6. 2/ 200 -9#

2#27 FO" DIN! DOOR HARDWARE

A# ! , ( , \$%-: BHMA A1>6#1=J 4/ 7 .-, 2, \* , 2\* '(4-6+' ( ) / 0, \$3, % + \$%-\*5 3% ( ) , \$\*5 \*6. . / \$2\*5 967 . , \$\*5 1- / \$ ) 6'+, \*5 % (+ %44, \*\* / \$', \* '(+4%2, + #

1# M%(61%426\$, \$\*: S69%, 42 2/ 4/ 7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / (, /1 23, 1/--/&' ( ):

%# H%1, -, M%(61%426\$ ( ) #

9# P, 7 ? / M%(61%426\$ ( ) #

2# B' 1/-+' ( ) + / \$ H%\$+&%\$, : R%2, + 1/ \$ + / \$ . % ( , - \* &, ' ) 3' ( ) 6. 2/ 12 > -9#

2#28 DOOR PROTECTIVE TRIM UNITS

A# ! , ( , \$%-: D // \$ . \$ / 2, 42'0, 2\$' 7 6('2\* 2/ 9, / 1 28. , % (+ + , \*') ( % \* \* . , 4'1', + 9, - / & / \$' ( 23, H%\$+&%\$, S, 2\*#

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B# S'@,: F%9\$4%2, .\$/2,42'/( .-%2, \* H?'4?5 %\$7/\$5 /\$ 7/.D (/2 7/\$, 23%( 2; -, \*\* 23%( +// \$ &'+23 H"DWD / ( \*2/ . \*'+, % (+ /2 7/\$, 23%( 1; -, \*\* 23%( +// \$ &'+23 / ( .6-- \*'+, # C// \$+ ' (%2, % (+ .\$/0'+, .\$/ ., \$ &'+23 % (+ 3, ') 32% \* \$, A6'\$, + &3, \$, 4/ (1'42' ( ) 3%\$+&%\$, + '42%2, \*# H,') 32 2/ 9, % \* \* ., 4'1', + '( 23, H%\$+&%\$, S, 2\*#

C# M, 2%- P\$/2, 42'/( P-%2, \*: ANSI/BHMA A1>6#6 4, \$2'1', + 7, 2%- .\$/2, 42'/( .-%2, \* H?'4?5 %\$7/\$5 /\$ 7/.D5 9, 0, -, + / ( 1/6\$ , + ) , \* HB=ED5 1%9\$4%2, + 1\$/ 7 23, 1/-- / &' ( )#

- 1# S2%'(-, \*\* S2, , -: 0>0 '(43 23'4?5 &'23 4/6(2, \$\*6(? \*4\$, & 3/-, \* HCSED#
- 2# B\$%\* \* / \$ B\$ / ( @ , : 0>0 '(43 23'4?5 &'23 4/6(2, \$\*6(? \*4\$, & 3/-, \* HCSED#
- :# "% 7' (%2, P-%\*2'4 / \$ A4\$8-'4: 1/8 '(43 23'4?5 &'23 4/6(2, \$\*6(? \*4\$, & 3/-, \* HCSED#

D# F%\*2, ( , \$\*: P\$/0'+, 7% (61%426\$, \$C\* +, \*) (%2, + 1%\*2, ( , \$ 28. , % \* \* ., 4'1', + '( 23, H%\$+&%\$, S, 2\*#

E# M, 2%- D// \$ E+) ' ( ): D// \$ .\$/2, 42'/( , + ) ' ( ) 1%9\$4%2, + 1\$/ 7 % 7' ('767 #0>0 '(43 23'4? 7, 2%- \*3, , 25 1/\$7, + '( 2/ % ( % ( ) -, / \$ ; U; 4% . \*3% . , \*5 \*6\$1%4, / \$ 7/\$2'\*, + 7/6(2, + / (2/ , + ) , / 1 + / / \$ P\$/0'+, % . .\$/ . \$%2, - , ) / 0, \$-%. 2/ %44/6(2 1/\$ .\$/2, 42'/( .-%2, \* % \* \$, A6'\$, + # H,') 32 2/ 9, % \* \* ., 4'1', + '( 23, H%\$+&%\$, S, 2\*#

F# M% (61%426\$, \$\*: S69B, 42 2/ 4/7 .-%(4, &'23 \$, A6'\$, 7, (2\*5 .\$/0'+, .\$/+642\* 98 / ( , / 1 23, 1/-- / &' ( ):

- 1# M4E' ( ( , 8 A\$43'2, 426\$%- H%\$+&%\$, HMED#
- 2# R/4?&/ / + M% (61%426\$' ( ) HROD#

2#21 FABRICATION

A# M% (61%426\$, \$C\* N%7, .-%2, : D/ (/2 .\$/0'+, .\$/+642\* 23%2 3%0, 7% (61%426\$, \$C\* (%7, / \$ 2\$%+, (%7, + \* .-%8, + '( % 0'\*9-, -/4%2' / ( , <4, .2 '( 4/ (B6(42' / ( &'23 \$, A6'\$, + 1\$, \$%2, + -%9, - \* % (+ \* % /23, \$&' \* , % . .\$/0, + 98 A\$43'2, 42#

- 1# M% (61%426\$, \$C\* '+, (2'1'4%2' / ( ' \* . , \$7'22, + / ( \$'7 / 1 -/4? 48' (+, \$\* / (-8#

B# B%\*, M, 2%-\*: P\$/+64, +// \$ 3%\$+&%\$, 6('2\* / 1 9%\*, 7, 2%- '(+ '4%2, +5 1%9\$4%2, + 98 1/\$7' ( ) 7, 23/ + '(+ '4%2, +5 6\*' ( ) 7% (61%426\$, \$C\* \*2% (+%\$+ 7, 2%- %--/85 4/7 . / \*'2' / (5 2, 7 ., \$5 % (+ 3%\$+ ( , \*\* # F6\$ ('\*3 7, 2%-\* / 1 % A6%- '28 , A6%- 2/ / \$ ) \$, %2, \$ 23% ( 23%2 / 1 \* ., 4'1', + +// \$ 3%\$+&%\$, 6('2\* % (+ BHMA A1>6#18#

C# F%\*2, ( , \$\*: P\$/0'+, +// \$ 3%\$+&%\$, 7% (61%426\$, + 2/ 4/7 .-8 &'23 .69-'\*3, + 2, 7 .-%2, \* . \$, . %\$, + 1/\$ 7%43' ( , 5 &/ / +5 % (+ \*3, , 2 7, 2%- \*4\$, & \* # P\$/0'+, \*4\$, & \* 23%2 4/7 .-8 &'23 4/7 7, \$4'%-8 \$, 4/ ) ('@, + '(+6\*2\$8 \*2% (+%\$+ \* 1/\$ % . -'4%2' / ( '(2, (+, +5, <4, .2 %-67' (67 1%\*2, ( , \$\* %\$, ( /2 ., \$7'22, + # P\$/0'+, P3'--' . \* 1-%2 3, % + \*4\$, & \* &'23 1' (\*3, + 3, % + \* 2/ 7%243 \*6\$1%4, / 1 + / / \$ 3%\$+&%\$, 5 6(-, \*\* /23, \$&' \* , '(+ '4%2, + #

- 1# C/ (4, %-, + F%\*2, ( , \$\*: F/ \$ +// \$ 3%\$+&%\$, 6('2\* 23%2 %\$, , < . / \* , + &3, ( +// \$ ' \* 4- / \* , +5 , <4, .2 1/\$ 6('2\* %-\$, % +8 \* ., 4'1', + &'23 4/ (4, %-, + 1%\*2, ( , \$\* # D/ (/2 6\* , 23\$ / 6) 3 9/ -2\* 1/\$ '( \*2%-%2' / ( &3, \$, 9/ -2 3, % + / \$ (62 / ( / . . / \*'2, 1%4, ' \* , < . / \* , + 6(-, \*\* '2 \* 23, / (-8 7, % ( \* / 1 \* , 46\$, -8 %22%43' ( ) 23, +// \$ 3%\$+&%\$, # W3, \$, 23\$ /



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FOR: \_\_\_\_\_

ISSUED: 11/06/2017

1D H' ( ) , \* 7 / \$ 2 ' \* , + 2 / + / \$ \* / \$ 1 \$ % 7 , \* J 6 \* , 2 3 \$ , % + , + 2 / 2 3 , 3 , % + & / / + \* 4 \$ , & \*  
 1 / \$ & / / + + / / \$ \* % ( + 1 \$ % 7 , \* #  
 2D S 2 \$ ' ? , . - % 2 , \* 2 / 1 \$ % 7 , \* #  
 : D C - / \* , \$ \* 2 / + / / \$ \* % ( + 1 \$ % 7 , \* #

9# S2 , , - T3 \$ / 6 ) 3 B / - 2 \* : F / \$ 2 3 , 1 / - / & ' ( ) 6 ( - , \* \* + / / \$ 9 - / 4 ? ' ( ) ' \* . \$ / 0 ' + , + :

1D S6 \$ 1 % 4 , 3 ' ( ) , \* 2 / + / / \$ \* #  
 2D C - / \* , \$ \* 2 / + / / \$ \* % ( + 1 \$ % 7 , \* #  
 : D S6 \$ 1 % 4 , 7 / 6 ( 2 , + , < ' 2 + , 0 ' 4 , \* #

: # S . % 4 , \$ \* / \$ S , < B / - 2 \* : F / \$ 2 3 \$ / 6 ) 3 9 / - 2 ' ( ) / 1 3 / - / & 7 , 2 % - + / / \$ \* #  
 = # F % \* 2 , ( , \$ \* 1 / \$ W / / + D / / \$ \* : C / 7 . - 8 & ' 2 3 \$ , A 6 ' \$ , 7 , ( 2 \* ' ( D H I W D H S # 2 5 ; R , 4 / 7 7 , ( + , +  
 F % \* 2 , ( , \$ \* 1 / \$ W / / + D / / \$ \* # ;  
 > # ! % \* ? , 2 ' ( ) F % \* 2 , ( , \$ \* : P \$ / 0 ' + , ( / ( 4 / \$ \$ / \* ' 0 , 1 % \* 2 , ( , \$ \* 1 / \$ , < 2 , \$ / \$ % . . - ' 4 % 2 ' / ( \* % ( +  
 , - \* , & 3 , \$ , % \* ' ( + ' 4 % 2 , + #

2# : 0 FINISHES

A# P \$ / 0 ' + , 1 ' ( ' \* 3 , \* 4 / 7 . - 8 ' ( ) & ' 2 3 B H M A A 1 > 6 # 1 8 % \* ' ( + ' 4 % 2 , + ' ( + / / \$ 3 % \$ + & % \$ , \* 4 3 , + 6 - , #  
 B# P \$ / 2 , 4 2 7 , 4 3 % ( ' 4 % - 1 ' ( ' \* 3 , \* / ( , < . / \* , + \* 6 \$ 1 % 4 , \* 1 \$ / 7 + % 7 % ) , 9 8 % . . - 8 ' ( ) % \* 2 \$ ' . . % 9 - , 5  
 2 , 7 . / \$ % \$ 8 . \$ / 2 , 4 2 ' 0 , 4 / 0 , \$ ' ( ) 9 , 1 / \$ , \* 3 ' . . ' ( ) #  
 C# A . . , % \$ % ( 4 , / 1 F ' ( ' \* 3 , + W / \$ ? : V % \$ ' % 2 ' / ( \* ' ( % . . , % \$ % ( 4 , / 1 % 9 6 2 2 ' ( ) / \$ % + 3 % 4 , ( 2 . ' , 4 , \* % \$ ,  
 % 4 4 , . 2 % 9 - , ' 1 2 3 , 8 % \$ , & ' 2 3 ' ( / ( , 3 % - 1 / 1 2 3 , \$ % ( ) , / 1 % . . \$ / 0 , + S % 7 . - , \* # N / 2 ' 4 , % 9 - , 0 % \$ ' % 2 ' / ( \* ' ( ' 2 3 , \* % 7 , . ' , 4 , % \$ , ( / 2 % 4 4 , . 2 % 9 - , # V % \$ ' % 2 ' / ( \* ' ( % . . , % \$ % ( 4 , / 1 / 2 3 , \$ 4 / 7 . / ( , ( 2 \* % \$ , % 4 4 , . 2 % 9 - ,  
 ' 1 2 3 , 8 % \$ , & ' 2 3 ' ( 2 3 , \$ % ( ) , / 1 % . . \$ / 0 , + S % 7 . - , \* % ( + % \$ , % \* \* , 7 9 - , + / \$ ' ( \* 2 % - , + 2 / 7 ' ( ' 7 ' @ ,  
 4 / ( 2 \$ % \* 2 #

PART 3 - EKECUTION

: # 1 EKAMINATION

A# E < % 7 ' ( , + / / \$ \* % ( + 1 \$ % 7 , \* 5 & ' 2 3 1 ( \* 2 % - - , \$ . \$ , \* , ( 2 5 1 / \$ 4 / 7 . - ' % ( 4 , & ' 2 3 \$ , A 6 ' \$ , 7 , ( 2 \* 1 / \$  
 ' ( \* 2 % - - % 2 ' / ( 2 / - , \$ % ( 4 , \* 5 - % 9 , - , + 1 \$ , \$ % 2 , + + / / \$ % \* \* , 7 9 - 8 4 / ( \* 2 \$ 6 4 2 ' / ( 5 & % - - % ( + 1 - / / \$ 4 / ( \* 2 \$ 6 4 2 ' / ( 5  
 % ( + / 2 3 , \$ 4 / ( + ' 2 ' / ( \* % 1 1 , 4 2 ' ( ) . , \$ 1 / \$ 7 % ( 4 , #  
 B# E < % 7 ' ( , \$ / 6 ) 3 ' ( ) ' ( 1 / \$ , - , 4 2 \$ ' 4 % - . / & , \$ \* 8 \* 2 , 7 \* 2 / 0 , \$ ' 1 8 % 4 2 6 % - - / 4 % 2 ' / ( \* / 1 & ' \$ ' ( ) 4 / ( ( , 4 2 ' / ( \*  
 9 , 1 / \$ , - , 4 2 \$ ' 1 , + + / / \$ 3 % \$ + & % \$ , ' ( \* 2 % - - % 2 ' / ( #  
 C# P \$ / 4 , , + & ' 2 3 ' ( \* 2 % - - % 2 ' / ( / ( - 8 % 1 2 , \$ 6 ( \* % 2 ' \* 1 % 4 2 / \$ 8 4 / ( + ' 2 ' / ( \* 3 % 0 , 9 , ( 4 / \$ \$ , 4 2 , + #

: # 2 PREPARATION

A# S 2 , , - D / / \$ \* % ( + F \$ % 7 , \* : F / \$ \* 6 \$ 1 % 4 , % . . - ' , + + / / \$ 3 % \$ + & % \$ , 5 + \$ ' - % ( + 2 % . + / / \$ \* % ( + 1 \$ % 7 , \*  
 % 4 4 / \$ + ' ( ) 2 / A N S I / S D I A 2 > 0 # 6 #  
 B# W / / + D / / \$ \* : C / 7 . - 8 & ' 2 3 D H I W D H S # > ; R , 4 / 7 7 , ( + , + H % \$ + & % \$ , R , ' ( 1 / \$ 4 , 7 , ( 2 " / 4 % 2 ' / ( \* 1 / \$  
 M ' ( , \$ % - C / \$ , W / / + F - 6 \* 3 D / / \$ \* # ;



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