Solid Ground

Home Inspections

+RPH ,QVSHFWLRQ 5HSR

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’DWH



3URSHUW\ DGGUHVV 0VSOH /HDI /DQH
0W 3OHDVDQW 6&

5HDO HVWDWH DDJHQW 6HOOHUV
+RPH 6ZHHW +RPH 5HDOW\

,QVSHFWHG E\
6WHSKHQ +RXPDUG
6ROLG *URXQG +RPH ,QVSHFWLRQV
6RXWK &DUROLQD /LFHQVH
&HUW$6L+,+RPH ,QVSHFWRU
,QIUDUHG &HUWLIL,HG +RPH ,QVSHFWRU

/HW V JHW WR NQRZ \RXU KRPH

+ RPH ,QVSHFWLRQ 5HSRUW 6XPPDU\

2YHUYLHZ

7KLV VXPPDU\ LV LQWHQGHG WR KLJKOLJKW WKH VWUXFWXUDO GD\ RI WKH LQVSHFWLRQ DQG WR OLVW DQ\ SRLQWV RI FRQFHUQ RU VDSVKRW RI WKH KRPH DW D PRPHQW LQ WLPH WR UHIOHFW LQ DQ\ SRLQW DIWHU WKH KRPH LQVSHFWLRQ

7KLV UHSRUW VKRXOG EH UHDG LQ LWV HQWLUHW\ WR JLYH WKH FRQGLWLRQ DW WKH WLPH WKH LQVSHFWLRQ WRRN SODFH EXW RQH UHIOHFWHG LQ WKH VXPPDU\ LI WKH LQVSHFWRU'V FRPPHQWV DUH UHFRPPHQG \RX UHYLHZ WKH HQWLUH UHSRUW WR OHDUQ DERXW \RX UHPHPEHU D UHSDLU QHHG WKDW ZDV LGHQWLILHG LQ WKH OHW XV NQRZ DQG ZH ZLOO EH KDSS\ WR DGGUHVV WKHP WRJHWKHU 6WDQGDUGV RI 3UDFWLFH 6RPH WLPH DIWHU WKH \ RI +RPH ,QVSHFWRUV $6+,

$Q\ FRVW HVWLPDWHV RU FRVW UDQJHV OLVWHG DUH LQWHQGH VLJQLILFDQWO\ FOLHQW LV DGYLVHG WR REWDLQ ZULWWHQ U WR FORVLQJ RI UHDO HVWDWH WUDQVDFWLRQ

7KLV VXPPDU\ LV JURXSHG LQWR ILYH SDUWV ,I RQH RU PRUH LV ORFDWHG DW WKH IURQW RI WKH LQVSHFWLRQ UHSRUW WKH

0DMRU 5HSDLU RU UHFWLRQ OLNHO\ LQYROYHV D VLJQLILFDQW H[UHSODFHPHQW RU FRUUHFWLRQ QRUPDOO\ LQYROYH D VXEVWDQWLDO RI HTXLSPHQW RU FRPSRQHQW WKDW LV DW WKH HQG RI LWV VH *HQHUDOO\ PDMRU LWHP QHHGV LPPHGLDWH DWWHQWLRQ LW Z

0RGHUDWH 5HSDLU RU UHFWLRQ OLNHO\ LQYROYHV D PRGHUDWH H[RU UHSODFHPHQW RU FRUUHFWLRQ QRUPDOO\ LQYROYH D PRUH VXEVW D SLHFH RI HTXLSPHQW RU FRPSRQHQW WKDW LV DW WKH HQG R IXWXUH *HQHUDOO\ PRGHUDWH LWHP QHHGV LPPHGLDWH DWWHQWLF

0LQRU 5HSDLU RU UHFWLRQ OLNHO\ LQYROYHV RQO\ D PLQRU H[S UHSODFH ,Q PRVW FDVHV WKHVH LWHPV DUH QHHGHG WR HQV DFWLYH WLPH RU FRUUHFWLRQ PD\ EH QHHGHG PRYH LQ *HQHUDOO\ PLQRU LWHP QHHGV LPPHGLDWH DWWHQWLRQ

0DLQWHQDQFH 6DIHW\ RU UHFWLRQ OLNHO\ LQYROYHV D PLQRU XUJHQW WKH\ FDQ EH FRPSOHWHG DIWHU \RX7KH PRVW LQ KD]DUGV ZKLFK VKRXOG EH DGGUHVVHG DV VRRQ DV SRVVLEOH 5HFRPPHQGDWLRQV RXWOLQHG EHORZ ZLOO KHOS WKH KRPHRZ HQVXULQJ D VDIH OLYLQJ HQYLURQPHQW E D YDULHW\ RI RSSRU UHSDLUV WR \RXU KRXVH ZKLFK FRXOG SRWHQWLDOO\ XWLOLW\ ELOOV 6RPH RI WKHVH LWHPV PD\ KDYH D VLJQLILFDQ DQG FRVW VDYLQJV DV ZHOO 5HFRPPHQG FRQVXOWLQJ ZLWK W

0RQLWRU RU PRVW FDVHV KLJKOLJKWHG DSSOLDQFHV DQG RU V\ DUH QHDULQJ WKH $VVXPHG UHPDLQLQJ OLIHWLPH FRPPHQG WKDW \RX PRQL V\VWHPV IRU SRVVLEOH SUREOHPV DQG SODQ WR UHSODFH WKH QRWH DSSOLDQFHV+ $&XQLWV KDYH EXLOW LQ NLWFKHQ DSSOLDQ QRW FRYHUHG XQGHU WKH GD\ OLPLWHG PHFKDQLFDO DQG

UHFRPPHQG WKDW \RX SXUFKDVH D \HVDHUW KRPH ZRUW DQW DQWXRQ
DIWHU \RX PRYH LQ HVSHFLDOO\ LI \RX DUH EX\LQJ DQ ROGHU

,QVSHFWLRQ & RQGLWLRQV

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7\SH RI WZRQ 6LQJOH)DPLO\ 2QH 6WRU\

3DUW RI WRZQ 3OHDVDQW

$JH RI KRPH \HDUV ROG

:KHQ ZDV WKH KRPH EXLOW

6TXDUH IRRWDJH VT IW

,V WKLV KRPH FXUUHQWOW KHU OLYHG LQ"

:HDWKHU &OHDU

2XWVLGH WHPSHUDWX DURXQG GHJV

%HLQJ XVHG DV D YDFDWLRQ KRPH IXUQLVKHG

+DV LW UDLQHG LQ W<HV

:DVOHDVHWGDFLW\ RQ<HV

"DV ZDWHU VHUYLFH <HV

: DV WKH JDV RQ" <HV

: DV WKH KHDW RQ XS WKH KRXVH" 1R

:RQ DUKH YDLO DW XSRQ DUULYDO DW WK <HV

: DWHU 6HZHU 3XEOLF &LWHU :DQG 6HZHU

1 RW VTXDUH IRRWDJH DQG DJH DUH DSSUR[LP DW DQG Z HUH QRWLQGHSHQGHQW YHULLHG E\ 6RQG* URXQG

+ R PH,QVSHFWLRQ5HSRUW6XPPDU\

0DMRU5HSDLU

7KHIROORZLQJLWHPVDUHPDUNHGDVRUHSDLUHFRPPHQGDWLRQVWKDWZHOLZLOOLQYROYHDVLJQLILFDQWH[SHQVHWRUHSDLURUHSODFH SRWHQWLDOO RUPRUHDFK LWHP 7KHVHFRUHFWLRQVRQO DOO LQYROYHDVXEVWDQWLDOUHSDLULQWKHQHDUIXWXUH * HQHUDOO LL DPDUULWHP QHHGVLPPHGLDWHDWWHQWLRQ LWZLOOEHKLJKOLWHGLQWKHUHSRUW$OORI WKHLWHPVOLVWHGEHYDOXDEOHDQGFRVW $OHGHFWLEDOPHFKDQLFDO+9$& ILUHSODFHDQGFKLQH\ UHSDLUVRUSXPELQJ UHSDLUHQHGVVKRXOGEHKDQGOHGE\ DIXOO OFHQVHGDQGTXDOLILHGSURIHVVLRQDOFRQWUDFWRU ,QVRPHFDVHV IXUWKHUHYDOXDWLRQE\ DSURIHVVLRQDOFRQWUDFWRUP D\ UHYHDODGGLWLRQDOUHSDLUHQHGVWKDWFRXOGDGGWRWKHVFRSHRI WKHUHSDLU

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$VYLHZHGIURP LQVLGHWKHFUDZOSDFH REVHUYHGWKDWWKHUHDUVHYHUDO [ZRRGHQSRVW DQGVFUHZ NDFNVXVHGWRVXSSRUWWKHVXE IORRU,QWHDG SLHUVKRXOGEHLQVWDOOHGLQNH\ ORFDWLRQVWRVXSSRUWWKHIORRU NHLVWRUEHDP V ZKLFKLQWXUQVXSSRUWVWKHIORRUV\VWHP 5HFRP PHQGKDYLQJ DIRXQGDWLRQFRQWUDFWRU HYDOXDWHIXUWKHUDQGLQVWDOOSHUP DQHQWSLHUV ZKHUHQHHGHGVR WKDWWKHIORRU\VWHP LV DV VWURQJ DQG VWXLG\ DV LWVKRXOGEH

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2EVHUYHGWKDWWKHIORRULQWKHOLQJURRP LV QRWGBYHO WKLV LV GXH WR URWWHG ZRRG FUDFNHGIORRUNHLVW DQG DIRXOVP HOXQGHUWKHVH DUHDV GXH WR KJK P RLVWXUHIORRGLQJ KXP LGLW LQWKH FUDZOSDFH RYHUWP H $V YLHZHGIURP LQVLGH WKH FUDZOSDFH WKHUH DUH LQGLFDWRQV WKDWWKH DUHD XQGHUWKH GLQJ URRP ZKLFK LV DQ DGGLWRQ KDV IORRGHG LQ WKH SDVW WKLV LV WKH GBZ HVWSDUWR WKH FUDZOSDFH JURXQG DQG ZLOKROG ZDWU 5HFRP PHQGKDYLQJ DIRXQGDWLRQ FRP SDQ\ HYDOXDWH IXUWKHUDQG UHSDLUHQHGVWKH GDP DJHG URWWHG DQG FUDFNHG ZRRG VXE IORRUIORRUNHLVW ZKHUHQHHGHGVR WKDWWKHIORRUV DJDLQ QBYHO WRQJ DQG WXLG\ DV LW VKRXOGEH $GGLWRQDOO UHFRP P HQGKDYLQJ WKH FRQWUDFWRULQVWDOO PHKDQLVP V WR SUHYHQWX[WUH IORRGLQJ VXFK DV LQVWDOOLQJ RI D VXP S SXP S LQ WKH GBZ SDUWR WKH FUDZOSDFH <RX P D\ DOVR ZDQWWR FRQVLGHU KDYLQJ WKH FUDZOSDFH HQFDSVXODWHG WR KHSS NHHS WKH QHZ ZRRG LQJRRG DQG GU\ FRQGLWRQ H[WHQVLYH YDSRUEDUULHUZLWK FRP P HUFLDOGHKXP LGLLHU VHDOHG FUDZOSDFH

$VYLHZHGIURP LQVLGH WKH FUDZOSDFH REVHUYHGWMP LWWGDP DJH WR WKH ZRRG XQGHUWKH IURQWGRRU 3 HDVH QRWW WKHUH DUH QR VLQJV RI WXEHV RUVFUDSHGWXEHV 5HFRP P HQG KDYLQJ D FRQWUDFWRUP DNH WKH QHHGHG UHSDLUV VR WKH ZRRG LV DJDLQ LQJRRG FRQGLWRQ DQG KDYH WKH KRP H WUHDWG IRUWMP LWV DQG SHWV

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2EVHUYHGWKDWWKHUH DUH VHYHQZLQGRZ VZKLFK KDYH EURNHQ VHDOV FDXVLQJ WKHP WR KDYH D FRQG\ DSSHDUDQFH : KHQ WKH VHDOV EURNHQ P RLVWXUH VHHSV LQ EHWZHHQ WKH SDQHV RI JODVV DQG FDXVHV FRQGHQVDWRQ $GGLWRQDOO WKH LQVXODWLQJ SURSHUWLHV RI WKH ZLQGRZ DUH VLJQLILFDQWO UHGXFHG VR WKDWWKDFW IXWXUHDUUSLHFH RI JODVV 3 HDVH QRWH, P D\ QRWKDYH EHHQ DEOH WR LGHQWI\ DOOEURNHQ VHDOV VRP H DUH KDUG WR VHH GXH WR WKH GXVW DQG LL WKH ZLQGRZ V DUH GLW\ $V D UHVXOWUFRP P HQG KDYLQJ D ZLQGRZ FRQWDFWRUHYDOXDWH WKH ZLQGRZ V IXUWKHUWR HQVXUH DOOEURNHQ VHDOV KDYH EHHQ LGHQWLILHG WKHQ UHSDLUHG WKHVH ZLQGRZ V DV QHHGHG VR WKDWWKH\ DJDLQ KDYH D FHDUYLHZ WR WKH RXWLGH DQG DUH LQVXODWHG VR KHSS FRQVHUYH HQHUJ\

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3 OHDVH QRWH WKDW WKH HOHFWUFDOSDQHOLV RUUJLQDOWR WKH KRP H ' XH WR DJH DQG FRQGLWRQ UHFRP P HQG FRQVXOWQJ ZLWK DQ HOHFWUFLDQ DERXWJ RLQJ DKHDG DQG UHSODFLQJ WKH P DLQ SDQHOZ LWK D P RGHUQ RQH WKDW LQFOXGHV *) &, DQG $) &, EUHDNHUV $ GGLWRQDOO WKH HOHFWUFLDQ FDQ XSGDWH WKH ZLULQJ VR WKDW WKH RXWOHW DUH DOQJ URXQGHG IRUVDIHW 3 OHDVH QRWH WKLV ZLOOEH D VLJQLLFDQWH[SHQVH

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2 EVHUYHG WKDWP DQ\ RI WKH HOHFWUFDORXWOHW LQVLGH RXWLGH FUDZ OVSDFH DUH QRWJ URXQGHG 5 HFRP P HQG KDYLQJ DQ HOHFWUFLDQ P DNH WKH QHHGHG UHSDLUV VR WKHVH RXWOHW DUH SURSHUO J URXQGHG IRU VDIHW) RU\ RXUUHHUHQFH D JURXQGHG RXWOHWKDV D VDIHW JURXQG WKH WKLUG SURQJ LQ DGGLWRQ WR WKH QRUP DOWZ R FRQGXFWRUV 6 SHFLLFDOO LWLV D V\ VWMP WR UHGLUHFWHOHFWUFLW RXWRI LW LQWQGHG SDWK VXFK DV D YRODJH VXUJH RUQJ KWQLQJ WR WKH JURXQG DQG SUHYHQWD GDQJ HURXV VKRFN WR WKH KRP HRZ QHU ,QD JURXQGHG RXWOHW WKH JURXQG ZLUH ZLOOUHGLUHFWHOHFWUFLW WR WKH JURXQG LQWMDG RI WKURXJK WKH KRP HRZ QHU ZKHQ QHHGHG

3UHSDUHG 8VLQJ K-WPHS*D+XJHH*DXJH F/LPHQVHWHSKHQ +RXPDUG

+ R PH ,QVSHFWLRQ 5HSRUW \XXXP P DU \

0 R G EL W H 5 H S D L U

7KH IROORZLQJ LWHPV ZLOO EH LQYROYHD P RGHUDWH[SHQVH WR UHSDLU RUUHSODFH SRWHQWLDOO RUGHVV HDFK LWHP 7KHVH FRUUHFWLRQV QRUP DOO LQYROYHD P RUH VXEVWDQWLDO UHSDLULQWHUP V RI VFRSH RULP SRUWDQFH RU DSLHFH RI HTXLSP HQWRUFRP SRQHQWV LV DVVHH HQG RI LWV VHUYLFH OLH DQG QHHGV WR EH UHSODFHG LQ WKH QHDUIXWXUH * HQHUDOO LL D P RGHUDWH LWHP QHHGV LP P HGLDWH DWWHQWLRQ LWZLOOEH QRWHG LQ WKH UHSRUW6 RP H RI WKH LWHP V GHMLQDWHG DV P RGHUDWH P D\ EH VXLWHG IRUD GR LW RXUVHOUHDGQ\ P DQ) XUWKHUHYDOXDWLRQ LV DGYLVHG E\ D SURIHVVLRQDOFRQWDFWRU SURYLGHG E\ D UHDO-HVWDWH WDQVDFWLRQ GHHG RU DSSOLFDEOH OHDVH DJUHHP HQW \RXVKRXOGEH KDQGOHG E\ DIXOO OHQJHG DQG TXDOLILHG SURIHVVLRQDOFRQWDFWRU ,QVRP H FDVHV IXUWKHUHYDOXDWLRQ E\ D SURIHVVLRQDOFRQWDFWRU P D\ UHYHDO DGGLWLRQDOUHSDLUQHHGV WKDWFRXOGDGG WR WKH WRWDOFRVWRI WKH UHSDLU

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2 EVHUYHG ZRRG URWRQ WKH UHDUEHGURRP V DGGLWLRQ ZLQGRZV WKLV LV FRP P RQ DQG LV GXH WR UDLQ VSODVKLQJ XS DJDLQVW WKH ZRRG RYHUHP H 5HFRP P HQG KDYLQJ D FRQWDFWRU UHSDLUWKH ZRRG URWRUHSODFH WKH ZLQGRZ DV QHHGHG WR HQVXUH WKH\ DUH ZDWHUWLJKW * RRG WR NQRZ 3DLQWSURWHFWV ZRRG WHP DQG VLGLQJ IURP WKH ZHDWKHU : KHQ SDLQWGHWHULRUDWHV WKH ZRRG LV H[SRVHG WR WKH HOHP HQWV DQG ZLOOEH VRUE P RLVWXUH 7KH ZRRG FDQ EHFRP H VXVFHSWLEOH WR WKH GHFD\ IXQJL ZKLFK ORGGV WR ZRRG URWZKHQ WKH P RLVWXUH FRQWHQWUHDFKHV RUP RUH : KHQ URWWHWV LQ WKH ZRRG OBVHV LWV VWUHQJWK DQG VWUXFWXUDOLQWHJULW\ DQG WKH URWFDQ VSUHDG LL QRW FRUUHFWHG

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9$3 25 %$55,(5 RQ WKH FUDZOVSDFH JURXQG

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2 EVHUYHG WKDW WKH UHLV D YDSRUEDUULHU SODVWF RQ SDUWR WKH JURXQG LQ WKH FUDZOSDFH) RU\ RXUHHUHQFH D YDSRUEDUULHUKHSV WR NHHS P RLVWXUH DQG GDP SQHVV LQ WKH FUDZOSDFH DWD P LQLP XP VR SUHYHQWV WKH FRQGLWLRQ RI WKH ZRRG DQG P DVRQU FRP SRQHQWV ZKLFK FRP SULVH WKH IRXQGDWLRQ $GGLWLRQDOO LWKHSV SUHYHQWV WKH KRXVH IURP VP HOOQJ P XVW : KHQ WKHUHLV H[FHVV P RLVWXUH LQ WKH FUDZOSDFH FRQGLWLRQV DUH UISH IRUWKH JURZWK RI P RQG DQG P LOHZ WKH GHFD\ IXQJL ZKLFK ORGGV WR ZRRG URWDQG ZRRG HDWQJ LQVHFW 5HFRP P HQG LQVWDOOQJ D P LOSDWF VKHHWWRQ WKH UHVWRI WKH JURXQG LQ WKH FUDZOSDFH ZKHUH QHHGHG P DNLQJ VXUH WR RYHUODS VHDP V DQG KDYH LWH[WHQG XS HDFK ZDOOE\ LQFKHV 3ODVH UHIHUEDFN WR VHFWLRQ IRUP RUH FRP P HQW UHJDUGLQJ HQFDSVXODWLRQ RI WKH FUDZOSDFH

+ R PH ,QVSHFWLRQ 5HSRUW WXP P DU \

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7KH IROORZLQJ LWHP V ZLOO DNH RQO LQYROYH D P LQRU H[SHQVH WR UHSDLU RUUHSODFH SRWHQWLDO RUGHVV HDFK LWHP ,Q P RVW FDVHV WKH VHLWHP V DUH QHHGHG WR HQVXUH WKH KRP H ZRUNV DV LWV KRXOGIRUGDLO OLQJ DFWLYLWLHV $V D UHVXOWVRP H P LQRU FRUUHFWLRQV P D\ EH QHHGHG EHIRUH FRPLQJ RUZLWKLQ DIHZ P RQWKV DIWHU P RYH LQ * HQHUDO LL D P LQRULWHP QHHGV LP P HGLDWH DWWHQWLRQ LWZLOOEH QRWHG LQ WKH UHSRUW0 DQ\ RI WKH LWHP V GHMJQDWHG D P LQRU P D\ EH VXLWHG IRUD GR LW\RXUVHOUXRUKDQG\ P DQ) XUWKHUHYDOXDWLRQ LV DGYLVHG E\ D SURIHVVLRQDOFRQWUDFWRUSURFHVVRUFRMQJ RI D UHDO-HVWDWH WUDQVDFWLRQ WR GHWHUPLQH H[DFWUHSDLU QHHGV DQG FRVW $OHHDFWLFDO P HFKDQLFDO+9$& ILUHSODFH DQG FKLP QH\ UHSDLUV RUSOXP ELQJ UHSDLUQHHGV VKRXOG EH KDQGOHG E\ D IXOO OLFHQVHG DQG TXDOLILHG SURIHVVLRQDOFRQWUDFWRU ,QVRP H FDVHV IXUWKHUHYDOXDWLRQ E\ D SURIHVVLRQDOFRQWUDFWRU P D\ UHYHDO DGGLWLRQDOUHSDLUQHHGV WKDWFRXOGDGGWRWKH WRWDOFRVWRI WKH UHSDLU

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2 EVHUYHG WKH JXWWHURQ WKH EDFN RI WKH KRP H LV GHDNLQJ 5HFRP P HQG KDYLQJ D FRQWUDFWRUURUKDQG\P DQ P DNH WKH QHHGHG UHSDLUV WR WKH GHDNLQJ

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2 EVHUYHG WKH WUHH OP EV DUH LQ FRQWDFW ZLWK WKH URRI VKLV FDQ GDP DJH WKH VKLQJOHV 5HFRP P HQG KDYLQJ D OLFHQVHG FRQWUDFWRUWMP WKH WUHHV EDFN DZD\ IURP WKH KRP H WR SUHYHQW WKH GDP DJH

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2 EVHUYHG WKDW WKH UHDU VDOWWDOLQV RQ WKH EORFN ZDOOZ KLFK LQGLFDWHV ZDWHU LQWUXVLRQ WKURXJK WKLV P DVRQU\ RYHUWP H WKLV LV FDOOHG HIIORUHVFHQFH DQG LWV D ZKLWK SRZGHU VXEVWDQFH VDOWWDOLQV OHIW RQ WKH EULFNV RUFHP HQWEORFNV DIWHUWKH ZDWHU HYDSRUDWHG 3HDVH QRWH WKLV LV RI FRQVHTXHQFH EHFDXVH WKH H[FHVV ZDWHU FRQWEXWHV WR WKH ZRRG VP RLVWXUH FRQWHQW ZKLFK QHHGV WR EH N HSWEHORZ 5HFRP P HQG LQVWDOOLQJ JXWWHUV DURXQG WKH KRP H DQG D YDSRUEDUULHU LL WKH KRXVH GRHVQWDOUHDG\ KDYH WKHVH WR KHOS N HHS P RLVWXUH WR D P LQLP XP

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$ V YLHZ HG IURP LQVLGH WKH FUDZOSDFH REVHUYHG WKDWWKHUH DUH QR P HWDOWH GRZQ WUDSV WR KHOS VHFXUH WKH KRP H WR LWV IRXQGDWLRQ 5HFRP P HQG KDYLQJ D FRQWUDFWRULQVWDOOP HWDOWH GRZQ WUDSV ZKHUH QHHGHG ZKHQ\RX KDYH DFKDQFH

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2EVHUYHG WKDWWKH VLQN FRXQWHULQ WKH KDOEEDWKURRP LV WRR ODUJH DQG WKH GRRUZRQWRSHQ FØVH DQWKH ZD\ 5HFRP P HQG UHSODFLQJ WKH VLQN YDQLW ZLWK RQH WKDWZLOODOØZ WKH GRRUD IXOORSHQ FØVH VZLQJ ZKHQ\RX KDYH D FKDQFH

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2EVHUYHG WKDWWRP H RI WKH ZLQGRZ V LQ WKH KRP H DUH SDLQWHG VKXW WKLV LV D VDIHW\ FRQFHUQ VLQFH LW¶V D JRRG LGHD WR KDYH DQ DOWHUQDWH HVFDSH URXWH LQ WKH HYHQW RI ILUH 5HFRP P HQG KDYLQJ D KDQG\P DQ UHSDLUDWØH ZLQGRZ SHUEHGURRP IRUVDIHW\

2EVHUYHG WKDWWKH ZLQGRZ V DUH KDUG WR RPSHQ ,W¶ D JRRG LGHD WR KDYH RQH ZRUNLQJ ZLQGRZ SHU EHGURRP DV DQ DOWHUQDWH HVFDSH URXWH LQ FDVH RI ILUH 5HFRP P HQG KDYLQJ D KDQG\P DQ UHSDLUWKH ZLQGRZ V VR WKH\ RSHQ DQG FØVH HDVLO\ DV WKH\ VKRXOG

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3ØWDVH QRWH WKH ZDWHU KHDWHU GRHV QRW KDYH D WHUP DOH[SDQVLRQ)RU\RXU HHUHQFH DQ H[SDQVLRQ VDQN LV D FRP SRQHQW ZKLFK KHOSV WR SUHY HQW WDQNV DWWKH 753 WHP SHUDWXUH PHVVXUH UHOHI YDOYH DQG DOOZ HZ\ LQWDQGHG KRWZDWHU KHDWHU UHTXLUHG WR KDYH WKHP 5HFRP P HQG KDYLQJ DQ DSSOLDQFH UHSDLP DQ LQVWDOODQH[SDQVLRQ IRUVDIHW\

2EVHUYHG WKDWWKH ZDWHU KHDWHU GRHV QRW KDYH VWDSS VV WR KROG LWV SODFH LQ FDVH RI DQ HDUWKTXDNH DQG LV QRW WLWWQJ LQ D GUDLQ SDQ 5HFRP P HQG KDYLQJ D FRQQHFWRULQWDOOHDUWKTXDNH VWDSS DQG D GUDLQ GUS SDQ

2EVHUYHG WKDWWKH ZDWHU KHDWHU735 YDOYH GUDLQ OLQH GRHV QRW H[WHQG WR WKH H[WHULRU 5HFRP P HQG KDYLQJ D SOXP EHUH[WHQG WKH GUDLQ OLQH GRZQ WR ZLWKLQ LQFKHV RI IORRUDQG WKHQ WR WKH RXWOHW RI WKH KRP H IRUVDIHW\

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2EVHUYHG WKH DILDGP LWDWCFHYDOYHIRUWKHSOXP ELQ LVLQDOXQGLU URRP FDELQHW WKLV ZLOOCRWDOOBZ DIU WR HQVXUWKH YDOYH DQG WKXV ZRQWZRUN DV LVWKRXGG 5HFRP PHQG KDYLQJ DSOXP ELQ P DNH WKH QHHGHG UHSDLUV

,QVLGH WKH FUDZOYSDFH REVHUYHG WKDWWKH FDSIRUWKHRGFDWUQGUDLQOCHLV FUDFNHG 5HFRP PHQG UHSODFLQJ WKH FDSZLWK DQHZ RQH WR SUHYHQWZHUJDVHVIURP HQWHULQJ WKH FUDZOYSDFH

3OHDVH QRWH WKDWGXH WR WKH DJH RI WKH KRP H LWV OLNHO WKDWWKH GUDLQVHZHUSLSHV UXQQLQJ IURP WKH KRP H WR WKH VWUHHWDUH FDWUQRURWKHUWSHP DWULDO) RU\RXUHHUHQFH FDWUQGUDLQOCHVKDYH EHHQ XVHGLQ EXLOGLQJV IRUP RUH WKDQ \HDUV DQG FDQ OWWRU \HDUV RUOHQJHU) RUWKRVH KRP HV ZKIFK DUH DERXW \HDUV RG LWJRRG WR QRWH WKDWWKH GUDLQVHZHUOCHV P D\ QHHG UHSDLURUUHSODFHP HQW$V DUHVXOW LWZRXOGEH ZLVH WR DVN WKH KRP H VHOOHULWKH SOXP ELQ KDV HYHUEDFNHG XS DQG QHHGHG DSOXP EHUFRU UHVROXWRQ $GGLWLRQDOO LWKHUH DUH OLJH WUHHV LQ WKH \DUG DS LV FRP P RQ IRUDQ RCHUKRP H WKHUHV D SRWWLEOLW WKDWWKH URRWV KDYH LQYDGHG WKH VHZ HUOCH DQG P D\ FDXVH D SOXP ELQ VWRSSDJH LQVIGH WKH KRP H 7KDWVDLG WKHUH LV QR ZD\ WR NQRZ WKH FXUUHQWFRQGLWLRQ RI WKH VHZ HUSLSH VLQFH LWV XQGHUJURXQG XQOHVV D VHZ HUOCH LQVSHFWLRQ LV SHUFRUP HG WKLV LV D YLGHR FDP HUD ZKIFK LV LQVHUWHG LQWR WKH VHZ HUCHDQ RXWDQG WKHQ[WHQGV GRZQ WKUX WKH VHZ HUOCH WDNLQJ SKRWRV DQG YLGHR +RZHYHU WKIS LV EH\RQG WKH QRUP DOVFRSH RI WKH KRP H LQVSHFWRQ 7KDWVDLG ZH QRZ KDYH WKH DELOLW WR SHUFRUP WKH VHZ HUOCH LQVSHFWRQ IRUDQ DGGLWRQDOCHH IXWDVN\RXKRP HLQVSHFWRU2 WKHUZLVH GXULQJ \RXULQVSHFWRQ ZH ZLOO GR RXUEHVWWR GHWHUP LQH LI WKHUH LV D FXUHQWSOXP ELQ WRSSDJH E\ UXQQLQJ WKH ZDWHU DQG IQXVKLQJ WKH WRLOHW KRZ HYHUWKIS LV QRWD GHILQLWH WHVW\(_VSHFLDO LI WKH KRXVH IV YDFDQWUHFRP P HQG KDYLQJ D SOXP EHU HYDOXDWH WKH GUDLQ DQG VHZ HUOCHV IXUWKHUYLD VHZ HUVFRSH LH D VHZ HUOCH LQVSHFWRQ DQG WKHQ UHSDLU RUUHSODFH WKH SLSHV DV QHHGHG 7KIS LV P DUN HG DS D PLQRU UHSDLUGXH WR WKH FRWWRI D VHZ HUSFRSH KRZ HYHUWZ LOEH D VLJQLFDQW[SHQVH WR UHSODFH WKH GUDLQ DQG VHZ HUSLSHV $GGLWLRQDOO ZH VXJJHVW SXUFKDVLQJ DQ LQ[SHQVLYH RQJRLQJ ZDUDQW\ WKUX\RXUXWLOW FRP SDQ\ +RPH6HUYH IRUGUDLQ DQG VHZ HUOCH UHSDLUUHSODFHP HQW

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2EVHUYHG WKDWWKH WRLOHW LQ WKH KDOOBDQG P DVWUEDWKV DUH OBRVH ZKHUH WKH\ FRQQHFWWR WKH IOBRU WKIS LV YHU FRP P RQ)RU\RXUHHUHQFH D OBRVH WRLOHWBERZ OP D\ UHVXOWLQ D OHDN DWWKH ZD[UQJ DQG RUDVWKH VXSSO SLSLQJ FRQQHFWRQ ZKIFK FDQ GDP DJH WKH IOBRUDQG VXE IOBRUEHBOZ 5HFRP P HQG KDYLQJ D KDQG\P DQ WUKWQ WKH IOBRUERQW VR WKH WRLOHWV DUH SURPSWO VHFXUH

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2EVHUYHG WKDWWKH WRLOHWWLQ WKH SULYDWHEDWK GRHV QRWKDYH D KDQGGH 5HFRP P HQG UHSDLU

‹(OHFWULFDO

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2EVHUYHG DGDP DJHG OVH ZLUH LQ WKH HOHFWULFDOSDQHO WKIS LV D VDIHW\ KD]DUG 5HFRP P HQG KDYLQJ DQ HOHFWULFDQ UHSDLUWKIS ZLUH IRUVDIHW\

2EVHUYHG WKDWRQH RUP RUH RI WKH FRUG WKDWLQ UHOHYHUV LQ WKH HOHFWULFDOSDQHOHUH P LVVLQJ) RU\RU UHIHUHQFH WKH SXUSRVH RI D FRUG WKDWLQ UHOHYHUV WR SURPHQWHOHFWULCDOZLUHV IURP EHLQJ SXOOHG RXWWKH SDQHO5HFRP P HQG KDYLQJ DQ HOHFWULFDQ LQVWDOOFRUG WKDWLQ UHOHYHUV ZKHUH GHVLUHG IRUVDIHW\

2EVHUYHG WKDWWKH FLUFXLWEUHDNHUV IRUWKH P DLQ HOHFWULCDOSDQHOHUH QRWOBEHOOHG 5HFRP P HQG KDYLQJ DQ HOHFWULCDQ SURPSWO OEHOWKH EUHDNHUV IRU\RXUQRUP DWRQ DQG VDIHW\

2EVHUYHG WKDWWKH HOHFWULCDOSDQHOCRYHUV EHLQJ KHOGLQ SODFH ZLWK ZRRG VFUHZV WKIS FDQ SHQHWDWH D ZLUH 5HFRP P HQG KDYLQJ DQ HOHFWULCDQ UHP RYH WKH ZRRG VFUHZ V DQG UHSODFH ZLWK FLUFXLWEUHDNHUCDELQHW VFUHZ VLQWHDG

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2EVHUYHG WKDW WKH UHVDKRP HP DGHHOHFWUFDORXWMCH[WWR WKH KDOWRLGW5HFRP PHQGKDYLQJ DQ HOHFWUFDQLQWDOOD SURPHURXWMZLWK*)&, SURMFWRQ IRUVDIHW

2EVHUYHG WKDW WKHGRRUEHOGRHVQWZRUNZKHQ WWWMG 5HFRP PHQGKDYLQJ DKDQG\P DQP DNHWKH UHSDLVQHHGG VR WKH GRRUEHOZRUNV DV LWWKRXGG

2EVHUYHG WKDW WKHUH VDZLUH FRQFHFWRQLQWKH JDUDJHZKLFK GRHV QRWKDYH DFRYHU5HFRP PHQGKDYLQJ DQ HOHFWUFDQRUKDQG\P DQLQVWDOOD FRYHUIRUWKLV ER[IRUVDIHW

2EVHUYHG WKDW WKHUH DUH DFRXSOHRI ZLUHFRQFHFWRQV LQWKH FUDZOSDFH DQG LQWKH DWWF ZKFK DUH QRW HQFORVHG LQDQ HOHFWUFDOER[5HFRP PHQGKDYLQJ DQ HOHFWUFDQHQFORVH WKHVH FRQFHFWRQV LQDQ HOHFWUFDOXQFWRQER[ZLWK DFRYHU IRUVDIHW

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2EVHUYHG WKDW WKHUH DUH*)&, *URXQG)DXOW&LUFXLWQMUXSWMV RXWMW LQ WKH EDWKURRP V EXWQRZ KHUH HQH LQ WKH KRXVH WKLV LV WSLFDORUD KRP H RI LWDJH VLQFH*)&, VZHUHQWUHTXLUHG WKURXJK RXWZKHQ WKLV KRP H ZDV EXLOW5HFRP PHQGKDYLQJ DQ HOHFWUFDQ LQVWDOO*)&, RXWMW LQVLGH WKH KRP H ZLWKLQ IWRI ZDWMU VXFK DV LQ WKH NLWKHQ DV ZHOODV LQ WKH JDUDJH DQG RQ WKH H[WUR IRUVDIHW 7LP ,I \RX WRUH D UHLUHDWRUR IUFH]HULQ WKH JDUDJH EH VXUH QRWWR SOXJ LWLQWR WKH*)&, RXWMWR SUHYHQW RXIRRG IURP VPRLOOJ LQ WKH HYHQWWKDWWKH*)&, WUSV DQG LV QRWUHMHFWLQJ D WP HO P DQQHU

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$WWKH RXWGRRUD FRP SUHVVRU WKH VXFWLRQ OLQH QRWFRP SOHWMO LQVXODWHG ZLWK D IRDP VOHHYH RQ WKLV XQLWSDUWRI WKH IRDP VOHHYH LV P LVVLQJ ZKFK FDQ SURGXFH FRQGHQVDWRQ GUS LQWR WKH KRP HV DWWF 5HFRP PHQGKDYLQJ DQ+9$& UHSDLUP DQ LQVXODWMW WKH VXFWLRQ OLQH ZKHUH QHHGG

+9$& &21'(167$,21 '5$,1 /,1(6$13 ,QVSHFWHG

$VYLHZHG IURP LQVLGH WKH DWWF REVHUYHG WKDWWKH GUDLQSDQ XQGHUQHDWK WKH DIUKDQGGHULV GLWV DQG UXVW WKLV FRXOG FDXVH WKH GUDLQ OLQH WR FRUURGH RUWKH SDQ WR RYHUIORZ 5HFRP PHQGKDYLQJ DQ+9$& UHSDLUP DQ FHDQ DQG UHSDLURUUHSODFH WKH GUDLQSDQ VR LWV DJDLQ LQJRRG FRQGLWLRQ

‹* DUDJH

5(&(,/,1*6 LQFOXGLQJ ILUHZDOO VHSDUDWLRQ ,QVSHFWHG

2EVHUYHG WKDWWKH UHVDQRPHQLQ WKH JDUDJH FHLQJ WKLV EUHDNV WKH ILUHWMWS)RU\RXUHHUHQFH GUZDOOSOR VHUYHV DV D ILUHWMWS ZKFK P HDQV WKDWWKG HD\ WKH SHQHWUDWRQ RI D ILUH XS LQWR WKH KRP H DWWF IRUD VKRUWDP RXQWRI WP H 5HFRP PHQGKDYLQJ D FRQWDFWRULQWDOOGUZDOOR WHQFORVH WKH JDUDJH FHLQJ IRUVDIHW

5(:$//6 LQFOXGLQJ ILUHZDOO VHSDUDWLRQ ,QVSHFWHG

2EVHUYHG WKDWWKH ZDOOLQWKH JDUDJH ZKFK LV DGMDFHQWWR WKH KRP H IRP HUHG LQSDQHQJ $V D UHVXOW, FRXOG QRWGHWHUP LQH LI WKHUH LV GUZDOOEHWZ WKH SDQHQJ) RU\RUUHHUHQFH GUZDOOSOR VHUYHV DV D ILUH WMWS WR KHS UHGFH WKH VSHHG DWZKFK ILUH VSUHDGV 5HFRP PHQGKDYLQJ D FRQWDFWRULQWDOOGUZDOOR WHQFORVH WKH FRQWDFWRULQWDOOGUZDOOV SUHVHQWRUQRW,I QRWWKHQ UHFRP PHQGKDYLQJ WKH FRQWDFWRULQWDOOGUZDOOR WKLV ZDOO IRUVDIHW

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7KH IROORZLQJ LWHPV OLNHO\ LQYROYH D PLQRU RUP LQLP DO[SHQVH WR FRUUHFWDQG DUH QRWXJHQW WKH\ FDQ EH FRP SOHWHG DWWU\ RX UH P RYHG LQ ZKHQ \RX KDYH D FKDQFH 7KDWVDLG VDIHW\ RIILFH KDJ DUGV ZKLFK VKRXOG EH DGGUHVVHG DV VRRQ DV SRVVLEOH ZLOOEH QRWHG DV D 0 LQRU5 HSDLULQWHQDQ 5HFRP P HQGDWLRQ RXWOLQHG EHOZ ZLOKHSWKH KRP HOHQW WHUP ZKLOH HQVXULQJ D VDIH OYLQ HQYLURQP HQW$GGLWLRQDOO WKHUH P D\ EH DYDLHW RI RSSRUWXQLWLHV WR P DNH XSGDWHV RUUHSDLU WR \RXKRXVH ZKLFK FRXOG SRWHQWDOO VDYH VLQLFDQW KRXUV LQ WKH IXWXUH \ RXU XQGHUVWDQGLQJ RI WKH SURSHUW\ DQG WKHUHE\ UHGXFH \RXUXWLOLW\ 6RP H RI WKHVH LWHP V P D\ KDYH D VLQLFDQW[SHQVH EXW P D\ DOR SURYLGH VXEVWDQWLDOQHUJ\ DQG FRWWDYLQJ V DV ZHO5 HFRP P HQG FRQVXOWLQJ ZLWK WKH DSSURSULDWH FRQWDFWRUIRUP RUH LQIRUP DWLRQ

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, Q V S H F W H G

2 EVHUYHG WKDWWKHUH LV VRP H GHEULV RQ WKH URRI WKLV FDQ FDXVH WKH VKLQJOHV WR DJH IDVWHU WKDQ QRUP DO LI HIIHFWLYH UWP H 5HFRP P HQG KDYLQJ WKH GHEULV UHP RYHG DQG DJDLQ SHUIRUP HG DV QHHGHG WR KHSS NHHS WKH VKLQJOHV LQJRRG VKDSH

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, Q V S H F W H G

2 EVHUYHG WKDWWKLV KRP H KDV JXWWHUV RQ RQH RUH P RUH VLGHV RI WKH KRP H EXWQRWDOOWKH ZD\ DURXQG 2 QFH \RX P RYH LQ \RX OLWDUWWR QRWLFH KRZ WKH UDLQGUDLQV RII \RXUKRP H ,QVRP H DUHDV \RX P D\ VHH WKH ZDWHUSRXUGRZ Q WKHVH DUH DUHDV ZKHUH WKH ZDWHUZ LOHURGH WKH VRLORYHUWLP H RUSRRQ[WWR WKH IRXQGDWLRQ DQG WKHQ VHHS GRZQ LQWR WKH FUDZOSDFH : KHQ \RX KDYH WKLV LQIRUP DWLRQ LW D JRRG WP H WR KDYH JXWWHUV LQVWDOOHG) RU \RXUHHHUQFH JXWWHUV FDUU ZDWHUDZD\ IURP WKH KRP H DQG IRXQGDWLRQ ZKLFK KHSSV SUHYHQWGDP DJH WR WKH VRIILW H[FHVV UDLQ ZDWHUIURP JHWWQ LQWR WKH FUDZOSDFH ZKLFK LV D VSDFH \RX ZDQWWR NHHS DV GU DV SRVVLEOH ZDWHUSHQHWUDWLRQ LQWR WKH KRP H P RGP LQHZ JURZ WK RQ WKH VLGLQJ DQG VRLOHURVLRQ 5HFRP P HQG KDYLQJ JXWWHUV LQVWDOOHG WKH UHVWRI WKH ZD\ DURXQG WKH KRP H ZKHQ \RX KDYH D FKDQFH

2 EVHUYHG WKDWWRP H RI WKH JXWWHUV ZHUH UHP RYHG EXWWKH GRZQVSRXWV ZHUH QRW WKDWWKH\ ZRUN DV WKH\ VKRXOG 7KHQ UHFRP P HQG FRQVLGHULQJ \RXU JXWWHUV DUH DOUHDG\ DW WKH HQG RI WKHLU OLIHVSDQ WKDW WKH\ VKRXOG EH UHP RYHG DQG LQVWDOOHG

3 OHDVH QRWH WKDW JXWWHUV DUH IXQGDPHQWDO 5HFRP P HQG KDYLQJ WKH JXWWHUV FOHDQHG VR WKDWWKH\ ZRUN DV WKH\ VKRXOG 7KHQ UHFRP P HQG FOHDQLQJ \RUU JXWWHUV WZLFH \HDU LQ WKH VSULQJ DQG LQ WKH IDOO

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, Q V S H F W H G

2 EVHUYHG WKDWWKH JOD]LQJ IRUPHG RUP RUH RI WKH ZLQGRZ VKDV GHWHULRUDWHG 5HFRP P HQG KDYLQJ D SDLQWHU JOD]H WKH ZLQGRZ V ZKHUH QHHGHG WR HQVXUH WKH JODVV LV ZHOOVHFXUHG DQG ZHDWKHUWLJKW

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, Q V S H F W H G

2 EVHUYHG WKDWWKH EXVKHV SDP V DUH LQFRQWDFW ZLWK WKH KRP H WKLV P D\ GDP DJH WKH VLGLQJ RYHUWP H 5HFRP P HQG WUP P LQJ WKH EXVKHV EDFN DZD\ IURP WKH KRP H ZKHQ \RX KDYH D FKDQFH

2 EVHUYHG WKDWWKH\ DUG VRLOLV D ELWWR KLJK LQ VRP H DUHDV DURXQG WKH KRP H V H[WXUH) RU \RXU UHIHUHQFH YLQ\OLGLQJ VKRXOG EH WKH JURXQG ,I WKDW¶V QRWSRVVLEOH IRUVRP H UHDVRQ DQ\ FHDUDQFH LV EHWWHUWKDQ QRQH 7KLV FHDUDQFH ZLOKHOS IRXQGDWLRQ H[SRVXUH LV WKHUHWR SUHYHQW ZDWHUIURP LQWKGLQJ LQWR WKH KRP H GXH WR SRQGLQJ KHDY\ UDLQV (YHQ ZLWK WKH EHWWGUDLQDJH V\VWP H[FHVV UDLQ FDQ RYHUZKHP \RXUKRP H VR LW¶V EHWWWR KDYH WKH DGGLWRQDO SURWHFWRQ RI DGHTXDW YLQ\OLGLQJ JURXQG FHDUDQFH ,I \RXIRXQGDWLRQ LV P RUH H[SRVHG LWZLOODOVR P DNH WKHUP LWV DQG RWKHU SHWV HDVLHUWR GHWHFW5 HFRP P HQG UHP RYLQJ VRP H RI WKH VRLOWR SURYLGH D JUHDWHUFHDUDQFH EHWZHHQ WKH JURXQG DQG WKH ERWWP RI WKH VLGLQJ ZKHQ \RX KDYH D FKDQFH

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2EVHUYHGWKDWWKLVKRPHKDVDQDPRXQWRILQVXODWLRQRQWKHDWWLFIORRUZKLFKHTXDWHVWR5 YHU FRPPRQIRUDKRPHRIWKLVDJH7RPD[LPL]HHQHUJ\ HIILFLHQF\ RI WKH KRPH UHFRPPHQGKDYLQJ D FRQWDFWRULQVWDOODGGLWLRQDOLQVXODWLRQWRUHDFK5 RUEHWWU)RU\RXUHHUHQFH WKH HIIHFWLYHQHVV RI LQVXODWLRQ LV P HDVXUHG E\ LWV5 QXP EHUZKLFK LV LWV DELOLW\ WR UHVLVWKH IORZ RI KHDW7KH KLJKHUWKH5 QXP EHU WKH JUHDWHUWKH UHVLVWDQFH WRZ LQWHUKHDWWUDQ7RGD\ V VWDQGDUGIRULQVXODWLQ LQ2HZHUKRPHV LV5 RUEHWWU

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2EVHUYHGWKDWWKHEDWKURRP YHQWV WMUP LQDWH LQ WKH DWWF WKLV LV FRP P RQ IRUD KRPH RI WKLV DJH 3OHDVH QRWH WKDWP RLVWKRVDULQ WKH DWWF ZLOKLQGHUWKH HIVXOWRQ V HIIHFWLYHQHVV RYHUWP H $ V DUHVXOWWKHVH YHQWV VKRXOGH[WHQG WR WKH RXWLGH 5HFRP P HQG KDYLQJ DKDQG\P DQUH YHQWWR WKH H[WHULRUI WKH KRP H ZKHQ RUEHIRUH LVXODWLQ LV DGGHG

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’ XH WR WKH DJH RI WKLV KRXVH LWV SRVVLEOH WKDWSRSFRUQ FHLQJV DQG RUDOG FHLQJ WDOHV LI SUHVHQWP D\ FRQWDLQ DVEHVWRV JLYHQ WKDWWZ DV EXLOWEHIRUH RUVRP HWP H LQ WKH HDUO V 0HIWRYHULQYHQWRULHV ZHUH QRWH[FXGHG IURP DVEHVWRV EDQ ,I \RX ZDQWR UHP RYH WKH SRSFRUQ WR FUHDWH D VP RRWK FHLQJ UHFRP P HQG KDYLQJ \RXUFHLQJ WHVWHG IRUDVEHVWRV ILWWR RHQVXUH WKH UHQRYDWRQ LV GRQH ILQD &HLQJ V FDQ EH WHVWHG YLD D SURIHVVLRQDORUYLD D GR LW\RXUVHOI NLW,I \RX GR QRWSODQ WR UHP RYH WKH SRSFRUQ WKHQ WKH FHLQJ LV FRQVLGHUVDIH DV ORQJ DV LWLV QRWGLVWXUEHG VXFK DV ZLWK UHSDLUV SDLQWHW

) RU\RXUHHUHQFH LWW QRWKQFRP P RQ WR ILQG DVEHVWRV LQ DFRXWF FHLQJ V LQWDOOHG LQ WKH VEHFDXVH H[LWQJ LQYHQWRULHV ZHUH H[HP SWURP WKH EDQ ,I \RX GR QRWSODQ WR UHP RYH WKH SRSFRUQ WKHQ WKH FHLQJ LV FRQVLGHUVDIH DV ORQJ DV LWLV QRWGLVWXUEHG VXFK DV ZLWK UHSDLUV SDLQWHW $VEHVWRV FDQEH HQFDSVXODWHG ZLWK D QHZ OD\ HURI QRQ DVEHVWRV DFRXWF VPSUD\ HG RYHUWKH WRS RI WKH H[LWQJ FHLQJ 7KLV LV WKH P RVWHFRQP LFDO5RXWQ WR WKH DVEHVWRV ,I WKH FHLQJ GRHV FRQWDLQ DVEHVWRV LWW KRXOG QRWEH SDLQWHG EHFDXVH URQQJ RUVSUD\LQJ FDQ UHOHDVH WKH KDUP IXOILEHUV LQWR WKH DLU ZKHUH WKH\ FDQ WKHQ EH LQKDOHG 3DLQWLV QRWDQ HIILFLHQWZD\ WR HQFDSVXODWH DVEHVWRV ILEHUV DFFRUGLQJ WR WKH (3$) RUP RUH LQIRUP DWRQ SOHDVH YLVLWWKH (3$ ZHEVLWH DWKWWS ZZZ HSD JRY DVEHVWRV LQGH[KWP O

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2EVHUYHGWKDWWKHUHLV ZDOSDSHUZKLFK KDV EHHQ SDLQWHG RYHUWKURXJKRXWWKH KRP H 5HFRP P HQG KDYLQJ D SDLQWQJ FRQWDFWRUUHP RYH WKH RGZDOSDSHUDQG UHSDLQW

’ XH WR WKH DJH WKH KRP H SOHDVH QRWH LWV OHO WKDWWKH ZDOO DQG FHLQJ V KDYH HHDG SDLQWXQGHU UHFHQWD\HUV RI SDLQW7KLV LV RQO P HQWRQHG LQ WKH HVTXHWKDW RX P D\ EH GRLQJ UHQRYDWRQ ZRUN RUZ LOEH UHP RYLQJ VFUDSLQJ WKH SDLQWDQG RUL \RX KDYH VP DOFKLOUHQ ZKR P D\ SXWWKHLUP RXWK RQ ZLQGRZ VLOO RU EDVHERDUGV LQ ZKLFK FDVH WKH SUHVHQFH RI HHDG SDLQWEHFRP HV D VDIHW\ KD]DUG $ VGHMLHG WKH SDLQWFDQ EH WHVWHG E\ DSURIHVVLRQDORUD GR LW\RXUVHOI NLW5 HFRP P HQG KDYLQJ D TXDOLILHG SDLQWRU FRQWDFWRU SURPSWO UHP RYH RUHQFDSVXODWH WKH RQG SDLQWDQG UHSDLQW DQ LQWUOHHVWHDUFK ZLWK WKH NH\ ZRUGV UHP RYLQJ \RUFRXVH RI DFWRQ VXJJHVWGRLQJ VP H UHMHDUFK DERXWHDG SDLQW DQ LQWUOHHVWHDUFK ZLWK WKH NH\ ZRUGV UHP RYLQJ HDG SDLQWURP ZDOO ZLOEULQ XS D YDUHWV RI DUWFHV RQ WKH WRSLF

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2 EVHUYHG WKDWWKH UHLV D VQJKWWWS EHWZHHQ WKH NLWKHQ DQG WKH RUJLQDQJ DUDJH ZKLFK P D\ FDXVH VRP HRQH P D\ WUS DQG IDOO 5HFRP P HQG KDYLQJ D IORRULQJ FRQWDFWRUHSDLUWKLV DUHD ZKHQ \RX DUH KDYLQJ UHSDLUV GRQH WR WKH IORRULQJ

' XH WR WKH DJH RI WKLV KRP H SOHDVH QRWH LW SRVVLEOH WKDWWRQG YLQ OQLQRHXP RUFHUDP LF IORRULQJ IL SUHVHQWWKRXJK WKH\ P D\ EH KLGGHQ XQGHUP RUH FXUHQWO\ HUV RI IORRULQJ VXFK DV LQ WKH NLWKHQ DQG EDWKURRP V P D\ FRQWDLQ DVEHVWRV HLWKHULQ WKH P DWHULDOV WKH JURXWDQG RULQ WKH DGKHVLYH 9 LQ\ IORRU WDVV P DQXIDFWXUHG DV UHFHQWO DV P D\ FRQWDLQ DVEHVWRV \$GGLWLRQDOO RQ ZRRG IORRULQJ P D\ FRQWDLQ HDG LQ WKH YDUQLVK ,I WKH IORRUKDVQ WEHHQ VDQGHG VLQFH WKHUH V D JRRG FKDQFH WKH IORRUYDUQLVK P D\ FRQWDLQ HDG ,Q P DQXIDFWXUHUV RI YDUQLVK WRSSHG XVLQJ EHDG EXWD JRRG UXOH RI WKXP E LV WR DOWZ IRUD VWR \ HDUVKHDOH RQ WKH VH SURGXFW ,I \ RX SODQ WR LQVWDOO QHZ IORRULQJ LWV EHWWHU VLP SO LQVWDOO LWRYHUWKH RGH[LWQJ IORRULQJ VR WKDWWKH DVEHVWRV ILEHUV DUH QRW GLVWXUEHG ,I \ RX ZDQW UHP RYH WKH FXUHQWDQG RULQDOD\ HUV RI IORRULQJ UHFRP P HQG FRQVXOWLQJ ZLWK D SURIHVLRQDO IORRUFRQWDFWRUWR HQVXUH WKH UHQRYDWLRQ LV GRQH LQ D VDIH P DQQHU) RUP RUH LQI RUP DWLRQ DERXWDVEHVWRV LQ RQG IORRULQJ SOHDVH YLVLW WKH (3\$ ZHEVLWH DWKWWS ZZZ HSD JRY DVEHVWRV LQGH[KWP O5 HUDGLQJ ZRRG IORRUV UHFRP P HQG KDYLQJ WKH ZRRG IORRULQJ WWWWG IRUWKH SUHP HQFH RI HDG SURIRUWRUHILQLVKLQJ WKHP HVSHFLDOO LI \RX SODQ WR LW \RXUWHD) RUWKLV WKHUH DUH GR LW\RUVHOHDG WWWKLW DW RXUOHFDO RZ HV RU+ RP H' HSRWRUVP SO DVND IORRULQJ FRQWDFWRUWR WWWWKH IORRUV IRU\RX ZKLGH SURYLGLQJ DQHWWP DWI RUWKH ZRUN

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2 EVHUYHG WKDWWKH DQLWWS EUDFN-HWRUWKH WWRYH LV QRWKQWLDOOHG) RU\RXUHHUHQFH WKLV EUDFN-HWV VHFXUHG WR WKH IORRUWKHQ WKH WWRYH VOGHV LQWR WKH EUDFN-HWWR LWGRHVQ WWS IRUZ DUG 5HFRP P HQG KDYLQJ DQ DSSOLDQFH UHSDLP DQ LQVWDOODQ DQWWS EUDFN-HWIRUVDIHW

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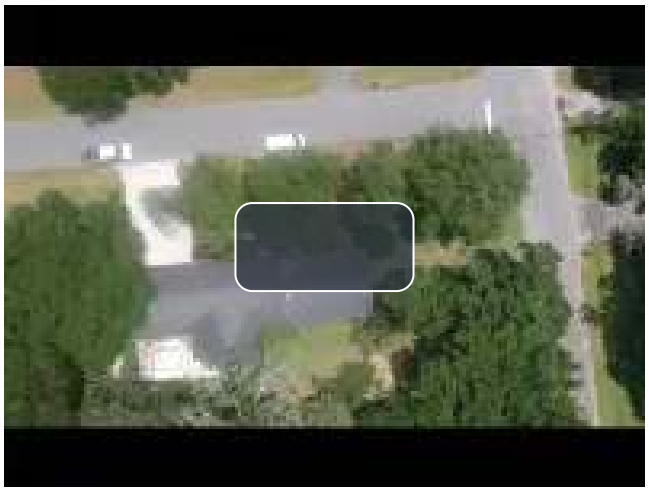
Video available online only.



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2 EVHUYHG WKH J XWWHURQ WKH EDFN RI WKH KRP H LV OHDNLQJ 5 HFRP P HQG KDYLQJ D FRQWDFWRUR UKDQG\ P DQ P DNH WKH QHHGHG UHSDLUV WR VWRS WKH OHDNLQJ



2 EVHUYHG WKDW WRP H RI WKH JXWWHUV Z HUH UHP RYHG EXW WKH GRZ QVSRXW Z HUH QRW LQ SODFH 5 HFRP P HQG UHP RYLQJ WKH GRZ QVSRXWV Z KHQ \ RX KDYH D FKDQFH







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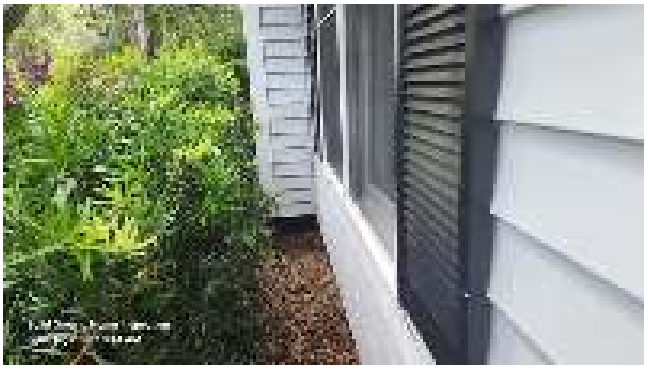
3 OHDVH UHI HUWR DWWDFKHG GRFXP HQWHQWWOHG $ 6 + , 6 WDQGDUGV RI 3 UDFWLFH I RUUHYLHZ RI WKH VFRSH DQG QDWXUH RI WKLV KRP H LQVSHFWLRQ DV LWDSSOLHV WR URRILQJ 6 SHFLLFDOO WKH LQVSHFWRULV UHTXLUHG WR LQVSHFWURRILQJ P DWHULDOV URRI GUDLQDJ H V\ VWHP V IODVKLQJ V VN\ OJ KWV FKLP QH\ V DQG URRILQJ SHQHWDWRQV 3 OHDVH QRWH WKDWGXH WR WKH KHLJ KWDQG GHVLJ Q RI WKH URRI RULQFOHP HQW Z HDWKHU , P D\ QRWKDYH EHHQ DEOH WR DFFHVV LWRUD Z DON RQ LQVSHFWRQ 3 OHDVH QRWH WKH LQVSHFWRULV 1 2 7 UHTXLUHG WR LQVSHFW DQWMQQDV LQWMUIRUV RI YHQW\ VWHP V IOXHV DQG FKLP QH\ V WKDWDUH QRWUHDGLO DFFHVVLEOH DQG RWKHULQWDOOHG DFFHVVRULHV

* HQHUDO/ LP LWDWRQV DQG ([FOXVLRQV
7 KH LQVSHFWRULV 1 2 7 UHTXLUHG WR SHUIRUP DFWRQV RUWR P DNH GHWMUP LQDWRQV RUWR P DNH UHFRP P HQGDWRQV QRWWSHFLLFDOO VWDWHG LQ WKH 6 WDQGDUGV RI 3 UDFWLFH ,QVSHFWRQV SHUIRUP HG XVLQJ WKLV 6 WDQGDUG DUH QRWWMFKQLFDOO H[KDXVWLYH QRWUHTXLUHG WR LGHQWI\ DQG UHSRUWFRQFHDOHG FRQGLWRQV OWMQWGHI HFW FRQVHTXHQWDOGDP DJ HV DQG FRVP HWF LP SHUHFWRQV WKDWGR QRWWJ QLLFDQWO DII HFWWKH FRP SRQHQW/ SHUIRUP DQFH RI LW LQWMQGHG IXQFWRQ

7 KH URRI RI WKH KRP H Z DV LQVSHFWHG DQG UHSRUWHG RQ Z LWK WKH DERYH LQIRUP DWRQ : KLOH WKH LQVSHFWRUP DNHV HYHU\ HII RUWWR ILQG DOO DUHDV RI FRQFHUQ VRP H DUHDV FDQ J R XQQRWLFHG 5 RRI FRYHULQJ V DQG VN\ OJ KWV FDQ DSSHDUWR EH OHDN SURRI GXULQJ LQVSHFWRQ DQG Z HDWKHUFRQGLWRQV 2 XULQVSHFWRQ P DNHV DQ DWWMP SWWR ILQG D OHDN EXWWRP HWP HV FDQQRW3 OHDVH EH DZ DUH WKDWWKH LQVSHFWRUKDV \ RXUEHVWLQWMUHVWLQ P LQG $ Q\ UHSDLULWMP V P HQWRQHG LQ WKLV UHSRUWWKRXOG EH FRQVLGHUHG EHI RUH SXUFKDVH ,WLV UHFRP P HQGHG WKDW TXDOLLHG FRQWDFWRUV EH XVHG LQ \ RXUI XUWKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWHV WR WKH FRP P HQW LQ WKLV LQVSHFWRQ UHSRUW













6WOHV 0DWHULDOV

6LGLQJ 6WOH
%ULFN
/DS

6LGLQJ 0DWHULDO
%ULFN YHQHHU
9LQ\O

([WHULRU(QWU ' RRUV
)LEHUJODVV

7\SHRI : LQGRZV
0RGHUQ GRXEOH SDQH WKHUP DOLQVXODWHG ZLQGRZV
2OG VWOH VLQJOH SDQH QRQ LQVXODWHG ZLQGRZV

$GNDFHQW6WUXFWXUHV $SSXUWHQDQFH
6LGHZDON

' ULYHZD\
&RQFUHWH

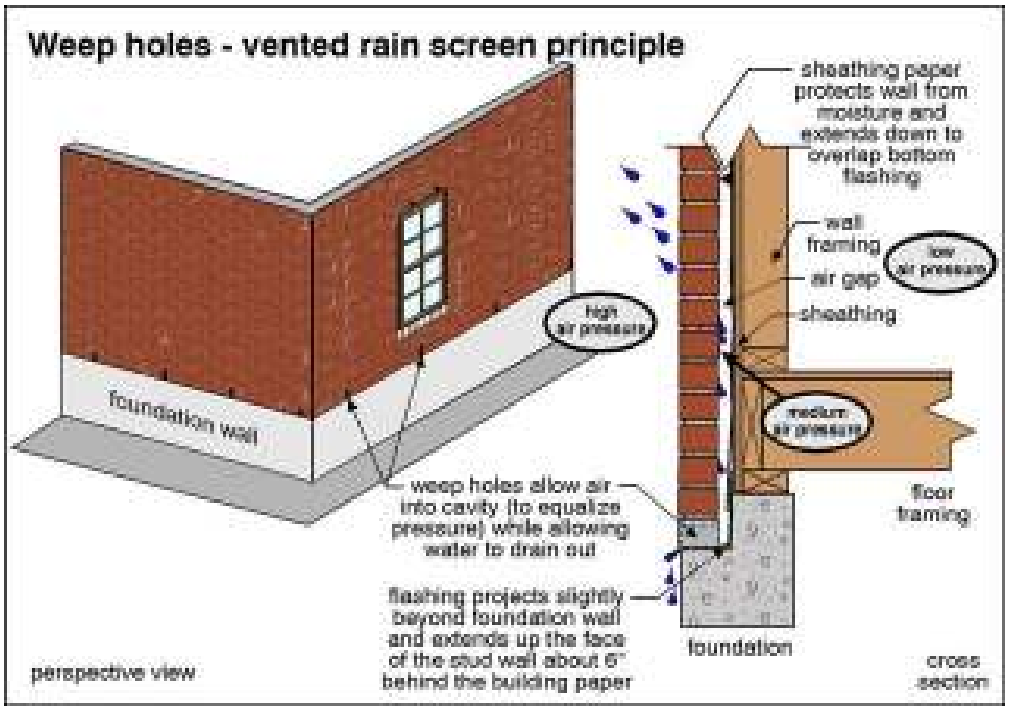
,WHP V

6,',1* DOO &ODGGLQJ)/$6+,1* 75,0
&RPPHQ,WQW SHFWHG

2EVHUYHG WKDWWKLV KRPH KDV EULFN YHQHHUVLGLQJ

*RRG WR NQRZ 0RVW EULFN KRXVHV EXLOW LQ WKH ODVWH EUHJHVW
GLIIHUHQFH EHWZHHQ EULFN YHQHHU DQG VROLGHPEUVRQNUL VKRWKGLQ
KRXVHLW:K EULFNWYKHQKHRXVH LV KROGLQJ XS WKH EULFN 7KH WHUP E
WKLQ VOLFHV WKDW \RX JOXH RQ \RXU NLWFKHQ ZDOO LVLRQLV RQHX
%HKLQG WKH EULFN YHQHHU LV D ZRRG IUDPH ZDOO ZKLFK LV DFWXD
YHQHHU LV UHDOO\ IXQFWLRQLQJ DV VLGLQJ





2 EVHUYHG WKDWWKLV KRP H KDV YLQ\O VLGLQJ DV Z HOO

*RRG WR NQRZ 9LGLQJ ZDV ILUVW LQWURGXFHG WR WKH H[WHULRU F
VWHDGLO\ JUHZ LQ SRSXODULW\ RYHU WKH QH[W URXWLGHFW\ DQG HDI
PDLQWHQDQFH 7\O VLGLQJ LV WKH QXPEHU RQH FKRLFH &RIQVLGLQJ D
VWDWLVWLFV VKRZ WZLFH DV PDQ\ KRPHRZQHUV VLGH WKHLU KRPHV
SURGXFW LV PDQXIDFWXUHG SULPDULO\ ZLWK SRO\YLQ\O FKORULGH
VWUHQJWKWLRXOOH\ QHHG WR UHSDLQW EHFDXVH WKH SRO\YLQ\O
QRW VXVFHSWLEOH WR PRLVWXUH EXLOGXS URWWLQJ RU WHUPLWH

:KLOH YLQ\O VLGLQJ LV GXUDEOH DWWUDFWLYH DQG HDV\ WR PDLQ
QHHGHG \RX FDQ ZDVK YLQ\O VLGLQJ ZLWK D VRIW FORWK RU RUGLQ
VXUIDFHV XVH RQO\ D VRIW EULVWOH EUXVK WR NHHS WKH JURRYHV
WKH ERWWRP RI WKH KRXVH DQG ZRUN XS DQG ULQVH WKH FOHDQLQ
KDV EULFN IDFLQJ FRYHU WKH EULFN VR LQ\O VLGLQJ GRW EHIRWHU
EH VXUH WR FDUHIXOO\ UHDG WKH ZDVKHU LQVWUXFWLRQV EHIRUH X
DW H\H OHYHO WR NHHS WKH ZDWHU RQ WRS RI WKH VLGLQJ ZKHUH
ZDVKHU XSZDUG DV ZDWHU PD\ FROOHFW EHKLQG WKH VLGLQJ 6PDO
FOHDQHUV VXFK DV DQG DV DUJHU VHFWLRQV D VROXWLRQ RI YLQ
KDV SURYHQ VXFFH VHXOXUH WR NHHS KHDW VRXUFHV VXFK DV EDUE
FORVH DQG WKH KHDW FDQ PHOW LW



(; 7 (5 , 2 5 ’ 2 2 5 6
& R P P H Q ,WQ W S H F W H G

(; 7 (5 , 2 5 : , 1 ’ 2 : 6
& R P P H Q ,WQ W S H F W H G

2 EVHUYHG Z RRG URWRQ WKH UHDUEHGURRP V DGGLWRQ Z LQGRZ V WKLV LV FRP P RQ DQG LV GXH WR UDLQ VSODVKLQJ XS DJ DLQVWWKH Z RRG RYHUWP H 5 HFRP P HQG KDYLQJ D FRQWDFWRUUHSDLUWKH Z RRG URWRUUHSODFH WKH Z LQGRZ V DV QHHGHG WR HQVXUH WKH\ DUH Z DWHUWJ KW * RRG WR NQRZ 3 DLQWSURWMFW Z RRG WLP DQG VLGLQJ IURP WKH Z HDWKHU : KHQ SDLQWGHWMUURUDWMV WKH Z RRG LV H[SRVHG WR WKH HOHP HQW DQG Z LOODEVRUE P RLVWXUH 7 KH Z RRG FDQ EHFRP H VXVFHSWEOH WR WKH GHFD\ IXQJ LZ KLFK OHDGV WR Z RRG URWZ KHQ LW P RLVWXUH FRQWMQWUHDFKHV RUP RUH : KHQ URWWHW LQ WKH Z RRG OBVHV LW VWUHQJ WK DQG VWUKFWXUDOLQWMJ ULW DQG WKH URWFDQ VSUHDG LL QRW FRUUHFWMG







2 EVHUYHG WKDW WRP H RI WKH ZLQGRZ V DUH QHZ HU GRXEOH SDQH WKHUP DOLQVXODWHG ZKLFK ZLOO SURYLGH HQHUJ\ VDYLQJV + RZ HYHU WKHUH DUH VWLOO IHZ RI WKH RUJLQDO JOD SDQH QRQ LQVXODWHG ZLQGRZ V <RX P D\ Z DQW WR FRQVLGHUUHSODFLQJ WKH RUJLQDO ZLQGRZ V ZKHQ \RX KDYH D FKDQFH IRU[WD HQHUJ\ VDYLQJV



2 EVHUYHG WKDWWKH JOD] LQJ IRURQH RUP RUH RI WKH ZLQGRZ V KDV GHWMULRUDWMG 5 HFRP P HQG KDYLQJ D SDLQWMU UH JOD] H WKH ZLQGRZ V ZKHUH QHHGHG WR HQVXUH WKH JOD VV LV ZHOOVHFXUHG DQG ZHDWKHUWJ KW

2 EVHUYHG WKDWRQH RI WKH ZLQGRZ V LQ WKH JDUDJH KDV D FRXSOH RI EURNHQ SDQHV 5 HFRP P HQG UHSDLU



($9(6 62)),76$6)&,$6
&RPPHQ,WQW SHFWHG

’(&.6 %$/&21,(62263 76 67(36 325&+$(76,26 5$,/,1*6
&RPPHQ,WQW SHFWHG

’5,9(:$< :$/.: $<6 6,’($/.6 $7,2)/2256 L:WK UHVSHFW WR WKHL
FRQGLWLRQ RI WKH KRPH
&RPPHQ,WQW SHFWHG

/$1’6&$3,1* *5$’,1* ’5$,1$*($,5(,7 $//6 :LWK UHVSHFW WR \
WKH FRQGLWLRQ RI WKH KRPH
&RPPHQ,WQW SHFWHG

2 EVHUYHG WKDWWKH EXVKHV SDOP V DUH LQ FRQWDFWZ LWK WKH KRP H WKLV P D\ GDP DJH WKH VLGLQJ RYHUWLP H
5 HFRP P HQG WLP P LQJ WKH EXVKHV EDFN DZ D\ IURP WKH KRP H ZKHQ\ RX KDYH D FKDQFH





2 EVHUYHG WKDWWKH \ DUG VRLOLV D ELWWRR KLJ K LQ VRP H DUHDV DURXQG WKH KRP H V H[WMULRU) RU\ RXUUHI HUHQFH YLQ\ OVLGLQJ VKRXOG EH WR LQFKHV DERYH WKH J URXQG ,I WKDW¶V QRWSRVVLEOH I RUVRP H UHDVRQ DQ\ FOHDUDQFH LV EHWWMUWKDQ QRQH 7 KLV FOHDUDQFH Z KLFK LV FDOOHG I RXQGDWLRQ H[SRVXUH LV WKHUH WR SUHYHQWZ DWMUI URP LQWJKGLQJ LQWR WKH KRP H GXH WR SRQGLQJ GXULQJ KHDY\ UDLQV (YHQ Z LWK WKH EHWWGUDLQDJ H V\ VWMP H[FHVV UDLQ FDQ RYHUZ KHOP \ RXUKRP H VR LW¶V EHWWWR KDYH WKH DGGLWRQDOSURWMFWRQ RI DGHTXDWM YLQ\ OVLGLQJ J URXQG FOHDUDQFH ,I \ RXUI RXQGDWLRQ LV P RUH H[SRVHG LWZ LOODOVR P DNH WMUP LWMV DQG RWKHUSHWW HDVLHUWR GHWMFW 5 HFRP P HQG UHP RYLQJ VRP H RI WKH VRLOWR SURYLGH D J UHDWMUFOHDUDQFH EHWZ HHQ WKH J URXQG DQG WKH ERWWRP RI WKH VLGLQJ Z KHQ \ RX KDYH D FKDQFH



2 EVHUYHG WKH WUHH OP EV DUH LQ FRQWDFWZ LWK WKH URRI WKLV FDQ GDP DJ H WKH VKLQJ OHV 5 HFRP P HQG KDYLQJ D OQGVFDSH FRQWDFWRUWLP WKH WUHHV EDFN DZ D\ IURP WKH KRP H WR SUHYHQWWKH GDP DJ H



3 OHDVH UHI HUWR DWWDFKHG GRFXP HQWHQWWOHG $ 6 + , 6 WDQGDUGV RI 3 UDFWLFH IRUUHYLHZ RI WKH VFRSH DQG QDWXUH RI WKLV KRP H LQVSHFWRQ DV LWDSSOLHV WR WKH H[WHULRU 5 HJ DUGLQJ WKH H[WHULRU WKH LQVSHFWRULV UHTXLUHG WR LQVSHFWZ DOOFRYHULQJ V IODVKLQJ V WLP H[WHULRUGRRUV DWWDFKHG DGNDFHQWGHFNV EDOFRQLHV VWRRSV VWHSV SRUFKHV DQG WKHLUDVVRFLDWHG UDLOQJ V HDYHV VRIILW IDVFLD V Z KHUH DFFHVVLEOH IURP WKH JURXQG OHYHO YHJHWDWRQ JUDGLQJ VXUDFH GUDLQDJ H UHWDLQLQJ Z DOOV WKDWDUH ONHO WR DGYHUVHO DIIHFWWKH EXLOGLQJ DGNDFHQWDQG HQWJ Z D\ Z DONZ D\ V SRUFKHV DQG GULYH Z D\ V 3 OHDVH QRWH WKH LQVSHFWRULV 1 2 7 UHTXLUHG WR LQVSHFWVVFUHHQLQJ VKXWHUV DZ QLQJ V DQG VLP LODUVHDVRQDODFFHVVRULHV IHQFHV ERXQGDU Z DOOV DQG VLP LODUVWUXFWXUHV JHRORJLFDO DQG VRLOFRQGLWRQV UHFUHDWRQDOIDFLOWHV RXWEXLOGLQJ V RWKHUWKDQ JDUDJHV DQG FDUSRUW VHDZ DOOV EUHDN Z DOOV GRFNV HURVLRQ FRQWURODQG HDUWK VWDELOL DWRQ P HDVXUHV

* HQHUDO LP LWDWRQV DQG ([FOXVLRQV
7KH LQVSHFWRULV 1 2 7 UHTXLUHG WR SHUIRUP DFWRQV RUWR P DNH GHWHUP LQDWRQV RUWR P DNH UHFRP P HQGDWRQV QRWWSHFLLLFDOO VWDWHG LQ WKH 6 WDQGDUGV RI 3 UDFWLFH ,QVSHFWRQV SHUIRUP HG XVLQJ WKLV 6 WDQGDUG DUH QRWWMFKQLFDOO H[KDXVWLYH QRWUHTXLUHG WR LGHQWW DQG UHSRUWFRQFHDOHG FRQGLWRQV ODWHQWGHIHFW FRQVHTXHQWDOGDP DJ HV DQG FRVP HWF LP SHUIHFWRQV WKDWGR QRWWLJ QLLLFDQWO DIIHFWWKH FRP SRQHQW SHUIRUP DQFH RI LW LQWHQGHG IXQFWRQ

7KH H[WHULRUR WKH KRP H Z DV LQVSHFWHG DQG UHSRUWHG RQ Z LWK WKH DERYH LQIRUP DWRQ : KLOH WKH LQVSHFWRUP DNHV HYHU HIIRUWWR ILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ J R XQQRWLFHG 3 OHDVH EH DZ DUH WKDWWKH LQVSHFWRUKDV \ RXUEHVWLQWHUHVWLQ P LQG $ Q\ UHSDLU

LWP V P HQWRQHG LQ WKLV UHSRUW WKRXGH EH FRQVLGHUHG EHIRUH SXUFKDVH ,WV UHFRP P HQGHG WKDWTXDOLHG FRQWDFWRUV EH XVHG LQ\ RXU IXUWKHULQVSHFWRQ RUUHSDLUVXHV DV LWUHDMV WR WKH FRP P HQW LQ WKLV LQVSHFWRQ UHSRUW

‹6WUJ)XWXUDO&RP SRQHQW/

6WOHV 0 DWHULDOV

) RXQGDWLRQ & UDZ OVSDFH Z EULFN SLHUV DQG EULFN VNLUWQJ	& ROXP QV 3 LHUV RU 3 LOHV %ULFN SLHUV & RQFUHWH EORFN SLHUV 6 WHHOVFUHZ NDFNV	0 HWKRG XVHG WR REVHUYH FUDZ OVSDFH & UDZ OHG & RXOG QRWDFFHVV
$ FFHVV DOOSDUW RI FUDZ OVSDFH" 1 R & RXOG QRWDFHVV WKH DGGLWRQ	) ORRU 6 WUXFWXUH ;	: DOO 6 WUXFWXUH 1 RWYLVLEOH ; Z RRG
& HLOQJ 6 WUXFWXUH ;	5 RRI 7\ SH + LS	5 RRI 6 WUXFWXUH 6 WLFN EXLOW/ DWHUDOEUDFLQJ FRP P RQ ERDUG Z RRG VODW VKHDWQJ
0 HWKRG XVHG WR REVHUYH DWLF / LP LWHG DFFHVVLEOW) URP HQWU	$ WLF LQI R 6 FXWOH KROH 3 XOO RZ Q VWDLUV	5 RRI WR Z DOO& RQQHFWLRQ 7RH QDLOHG

,WHP V

) 2 8 1 ' $7 , 2 1 6 & 5/$6 3 $ & (6
& R P P H Q ,WQ W S H F W H G

2 EVHUYHG WKDWWKLV KRP H V IRXQGDWLRQ LV D V\ WHP RI EULFN SLHUV DQG KDV D EULFN VNLUWQJ Z DOO Z KLFK HQFORVHV WKH FUDZ OVSDFH

*RRG WR NQRZ 7KH JRDO LV WR NHHS WKH FUDZOVSDFH DV GU\ DV S
LQWHJULW\ RI WKH ZRRG DQG PDVRQU\ ZKLFK FRPSULVH WKH IRXQGD
RU PRUH IURP GLUHFW FRQWDFW ZLWK PRLVWXUH RU IURP D YHU\ K
JURZWK RI PROWGKPLOGHDZ\ IXQJL ZKLFK OHDGV WR ZRRG URW DQG WH
VWUXFWXUDO LQWHJULW\ DQG WKH URW FDQ VSUHDG LI QRW FRUUHF
ZLWKLQ QRUPDO UDQJH OHVV WKDQ ZLWK WKH FRPELQDWLRQ RI
IRXQGDWLRQ D YDSRU EDUULHU RQ WKH FUDZOVSDFH JRRG YHQWLR
WKUX WKH FUDZOVSDFH YLD IRXQGDWLRQ YHQWV


Inside the crawl space


















Piers























3 GHDVH QRWH , FRXOG QRW DFFHVV RQH RUP RUH SDUW RI WKH FUDZ OSDFH GXH WR HLWKHU DFN RI VSDFH GHEULV RU WDQGLQJ Z DWHU 7KHUHIRUH , FRXOG QRW LQVSHFW WKH VHDUHDV 7KLV LV DQ I\ L 6 SHFLILFDOO WKH DUHD XQGHUWKH DGGLWRQ EHKLQG WKH IDP LO URRP J DUDJH FRQYHUVLRQ LV WR VP DOODQ RSHQLQJ DQG WKHUHIRUH , FRXOG QRW HQWHU WKLV VSDFH


too small to enter
Solid Ground Home Inspection
June 16, 2023 12:39 PM


Solid Ground Home Inspection
June 16, 2023 12:39 PM





2 EVHUYHG WKDWWKHUH DUH VDOWVWDLQV RQ WKH EORFN ZDOOZ KLFK LQGLFDWHV ZDWHUKDV EHHQ VHHSLQJ WKURXJK WKLV P DVRQU RYHUWP H WKLV LV FDOOHG HIIORUHVFHQFH DQG LWV D ZKLWK SRZGHU VXEVWDQFH VDOWVWDLQV OHIWRQ WKH EULFNV RUFHP HQWEORFNV DIWUWKH ZDWUKDV HYDSRUDWHG 3 OHDVH QRWH WKLV LV RI FRQVHTXHQFH EHFDXVH WKH H[FHVV ZDWUFRQWEXWV WR WKH ZRRGV P RLWXUH FRQWQWZ KLFK QHHGV WR EH NHSWEHOZ 5 HFRP P HQG LQWDOQU JXWWUV DURXQG WKH KRP H DQG D YDSRUEDUULHU LL WKH KRXVH GRHVQWDOHDG\ KDYH WKHVH WR KHSS NHHS P RLWXUH WR D P LQLP XP



)281'$7,21 7,('2:16 6WUDSV RU EROWV
&RPPHQ1WRWW 3UHVHQW

$VYLHZHGIURP LQVLGH WKH FUDZ OVSDFH REVHUYHG WKDWWKHUH DUH QR P HWDOWH GRZ QVWUDSV WR KHOS VHFXUH WKH KRP H WR LWV IRXQGDWRQ 5HFRP P HQG KDYLQJ D FRQWDFWRULQWDOOP HWDOWH GRZ QV VWUDSV ZKHUH QHHGHG ZKHQ \RX KDYH D FKDQFH

&2/8016 3,(56 RU 3,/(6
&RPPHQ,WQW SHFWHG

2 EVHUYHG WKDWWKH SLHUV DUH LQJ RRG FRQGLWRQ * RRG WR NQRZ &RQXP QV SLHUV DUH DQ LP SRUWDQWWWKFWXUDO FRP SRQHQWRI WKH IRXQGDWRQ 7KHLUSXUSRVH LV WR WUDQVI HUORDGV IURP EHDP V GRZ QWKURXJ K WKH IRRWQJ V WR WKH VRLO



$VYLHZHGIURP LQVLGH WKH FUDZ OVSDFH REVHUYHG WKDWWKHUH DUH VHYHUDO [ZRRGHQ SRWW DQG VFUHZ NDFNV XVHG WR VXSSRUWWKH VXE IORRU ,QWMDG SLHUV VKRXOG EH LQWDOOHG LQ NH\ ORFDWRQV WR VXSSRUWWKH IORRU MRLWW RUEHDP V ZKLFK LQ WXUQ VXSSRUW WKH IORRUV\ VWMP 5HFRP P HQG KDYLQJ D IRXQGDWRQ FRQWDFWRU HYDOXDWH IXUWKHUDQG LQWDOOSHUP DQHQWSLHUV ZKHUH QHHGHG VR WKDWWKH IORRUV\ VWMP LV DV VWURQJ DQG VWXUG\ DV LWWKRXOG EH


There are several wood posts and screw jack(s) which are supporting the floor system







) / 2 2 5 6 6 W U X F W X U D O
& R P P H Q ,WQ W S H F W H G

2 EVHUYHG WKDWWKH IORRULQ WKH OYLQJ URRP LV QRWOHYHO WKLV LV GXH WR URWWHG Z RRG FUDFNHG IORRUMRLVW DQG D IRXOVP HOOXQGHUWKHVH DUHDV GXH WR KLJ K P RLVWXUH IORRGLQJ KXP LGLW LQ WKH FUDZ OVSDFH RYHUWP H $ V YLHZ HG IURP LQVLGH WKH FUDZ OVSDFH WKHUH DUH LQGLFDWRQV WKDWWKH DUHD XQGHUWKH GLQLQJ URRP Z KLFK LV DQ DGGLWRQ KDV IORRGHG LQ WKH SDVW WKLV LV WKH ORZ HVWSDUWRI WKH FUDZ OVSDFH J URXQG DQG Z LOOKROG Z DWHU 5 HFRP P HQG KDYLQJ D IRXQGDWRQ FRP SDQ\ HYDOXDWH IXUWKHUDQG UHSODFH WKH GDP DJ HG URWWHG DQG FUDFNHG Z RRG VXE IORRUIORRUMRLVW Z KHUH QHHGHG VR WKDWWKH IORRULV DJ DLQ OHYHO VWURQJ DQG WXUG\ DV LWWKRXOG EH $ GGLWRQDOO UHFRP P HQG KDYLQJ WKH FRQWDFWRULQWDOOP HFKDQLVP V WR SUHYHQWXWXUH IORRGLQJ VXFK DV LQWDOODWRQ RI D VXP S SXP S LQ WKH ORZ SDUWRI WKH FUDZ OVSDFH <RX P D\ DOVR Z DQWWR FRQVLGHUKDYLQJ WKH FUDZ OVSDFH HQFDSVXODWHG WR KHOS NHHS WKH QHZ Z RRG LQ J RRG DQG GU\ FRQGLWRQ H[WHQVLYH YDSRUEDUUHUZ LWK FRP P HUFLDOGHKXP LGLLLHU VHDOHG FUDZ OVSDFH


Living room floor is not level


Floor is not level

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June 16, 2023 12:29 PM


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June 16, 2023 12:29 PM





$V YLHZHG IURP LQVLGH WKH FUDZOVSDFH REVHUYHG WKUP LWV GDP DJH WR WKH ZRRG XQGHUWKH IURQWGRRU 3GHDVH QRWH WKHUH DUH QR VLJQV RI WKEHV RUVFUDSHG WKEHV 5HFRP P HQG KDYLQJ D FRQWDFWUP DNH WKH QHHGHG UHSDLUV VR WKH ZRRG LV DJDLQ LQJRRG FRQGLWRQ DQG KDYH WKH KRP H WUHDWG IRUWUP LWV DQG SHVW





$ V YLHZ HG IURP LQVLGH WKH FUDZ OVSDFH REVHUYHG WKDWWKHUH DUH D YDULHW RI UHSDLUV VR WKH IORRUMRLVW DQG VXE IORRUWKURXJ KRXWWKLV VSDFH 3 OHDVH QRWH VRP H RI WKH UHSDLUV VR WKH Z RRG GR QRWKDYH MRLVWKDQJ HUV RUD OHGJ HUERDUG DV WKH\ VKRXOG 5 HFRP P HQG KDYLQJ D FRQWDFWRUP DNH WKH QHHGHG UHSDLUV VR WKH WKH IORRU V\ WMP LV DV WURQJ DQG WXUG\ DV LWWKRXOG EH





$ V YLHZ HG IURP LQVLGH WKH FUDZ OVSDFH REVHUYHG WKDWWKHUH LV GDUN VWDLQHG VXE IORRUQH[WWR WKH FDVWLURQ GUDLQ OQH 3 OHDVH QRWH WKDWZ KHQ WHVWHG WKLV Z RRG LV GU\ DQG VRQG DQG WKHUH DUH QR LQGLFDWRQV RI DQ DFWLYH OHDN DWWKLV WLP H 7 KLV LV DQ I\ L



2 EVHUYHG WKDWWKHUH LV LQDFWLYH IXQJ LRQ WKH Z RRG LQ RQH RUP RUH SODFHV WKURXJ KRXWWKH FUDZ OVSDFH Z KLFK LQGLFDWHV WKDWWKH Z RRG KDG KLJ K P RLVWXUH DWRQH WLP H 3 OHDVH QRWH WKDWWKH P RLVWXUH FRQWHQWRI WKH Z RRG LV QRUP DO OHVV WKDQ Z KHUH WHVWHG Z LWK D P RLVWXUH P HWHUDWWKH WLP H RI WKLV KRP H LQVSHFWRQ) RU\ RXU UHIHUHQFH DV OHQJ DV WKH P RLVWXUH FRQWHQWRI WKH Z RRG UHP DLQV EHORZ WKH IXQJ LUHP DLQV LQDFWLYH

5 HFRP P HQG P RQLWRULQJ WKH P RLVWXUH FRQWHQW RI WKH ZRRG SHURGLFDOO WR HQVXUH P RLVWXUH FRQWHQWP DLQV EHORZ 3 OHDVH QRWH WKDW GXH WR SDWH[FHVV P RLVWXUH \RX P D\ ZDQW FRQVLGHUKDYLQJ WKH FUDZ OSDFH HQFDSVXODWHG RQFH UHSDLUV WR WKH ZRRG KDYH EHHQ P DGH 7KLV LQFOXGHV LQVXODWLQJ D IUHVK YDSRUEDUULHUQ WKH FUDZ OSDFH JURXQG DQG XS WKH VLGHV FOHDQLQJ WKH IXQJL IURP WKH UHP DLQLQJ ZRRG WKDWZ DV QRWVHSDFHG VHDOLQJ RI WKH IRXQGDWRQ YHQW DQG LQVWDOOLQJ D FRP P HUFLDOGHKXP LGLILHU WKLV ZLOKHSS N HHS WKH ZRRG DWD QRUP DOP RLVWXUH FRQWHQW











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3 OHDVH UHI HUVR DWDFKHG GRFXP HQWHQWDOHG $ 6 + , 6 VDQGDUGV RI 3 UDFWLFH IRUUHYLHZ RI VKH VFRSH DQG QDWXUH RI VKLV KRP H LQVSHFWRQ DV LWDSSOLHV VR VWXFWXUDOFRP SRQHQW 6 SHFLLLFDOO VKH LQVSHFWRULV UHTXLUHG VR LQVSHFWVWXFWXUDOFRP SRQHQW LQFOXGLQJ VKH IRXQGDWRQ DQG IUDP LQJ 3 OHDVH QRWH VKH LQVSHFWRULV 1 2 7 UHTXLUHG VR SURYLGH HQJLQHHULQJ RUDUFKLWHFWXUDOVHUYLFHV RUDQDOVLV RIIHUDQ RSLQLRQ DERXWVKH DGHTXDF\ RI VWXFWXUDOV\ VWHP V DQG FRP SRQHQW HQWHUXQGHUIORRUFUDZ OVSDFH DUHDV VKDW KDYH OHVV VKDQ LQFKHV RI YHUWLFDOFOHDUDQFH EHWZHHQ FRP SRQHQW DQG VKH JURXQG RUVKDWKDYH DQ DFFHVV RSHQLQJ VP DOOHUVKDQ LQFKHV E\ LQFKHV RUWDYHUVH DWWF OHDG EHDULQJ FRP SRQHQW VKDWDUH FRQFHDOHG E\ LQVXODWRQ RUE\ RVKHUP DWHUDOV

* HQHUDO/ LP LWDWRQV DQG ([FOXVLRQV
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7KH VWXFWXUH RI VKH KRP H Z DV LQVSHFWHG DQG UHSRUWHG RQ Z LWK VKH DERYH LQIRUP DWRQ : KLOH VKH LQVSHFWRUP DNHV HYHU\ HIIRUWVR ILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ JR XQQRWLFHG 3 OHDVH EH DZ DUH VKDWVKH LQVSHFWRUKDV \ RXUEHVWLQWHUHVWLQ P LQG $ Q\ UHSDLULWHP V P HQWRQHG LQ VKLV UHSRUWVKRXOG EH FRQVLGHUHG EHIRUH SXUFKDVH ,WLV UHFRP P HQGHG VKDWTXDOLLHG FRQWDFWRUV EH XVHG LQ \ RXUIXUWKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWHV VR VKH FRP P HQW LQ VKLV LQVSHFWRQ UHSRUW

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& UDZ OVSDFH 0 RLVWXUH & RQWRO
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2 EVHUYHG WKDWWKLV KRP H KDV DQ DP RXQWRI LQVXODWRQ RQ WKH DWWF IORRUZ KLFK HTXDWHV WR 5 YHU\ FRP P RQ IRUD KRP H RI WKLV DJH 7R P D[LP L] H HQHUJ\ HIILFLHQF\ RI WKH KRP H UHFRP P HQG KDYLQJ D FRQWDFWRU LQWDOODGGLWRQDOLQVXODWRQ WR UHDFK 5 RUEHWWHU) RU\ RXUUHIHUHQFH WKH HIIHFWLYHQHVV RI LQVXODWRQ LV P HDVXUHG E\ LW 5 QXP EHUZ KLFK LV LW DELOW WR UHVLVWWKH IORZ RI KHDW7 KH KLJ KHUWKH 5 QXP EHU WKH J UHDWHU WKH UHVLWDQFH WR Z LQWHUKHDWORVV RUVXP P HUKHDWJ DLQ 7RGD\ V VWDQGDUG IRULQVXODWRQ LQ QHZ HUKRP HV LV 5 RUEHWWHU







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&RPPHQ,WQWSHFWHG
2EVHUYHGWKDWKHDWFLVZHOYHQWDWGYLDUGJHDQGVRIILWYHQW SHDVHVHHIRRZLQJGLDJUDP

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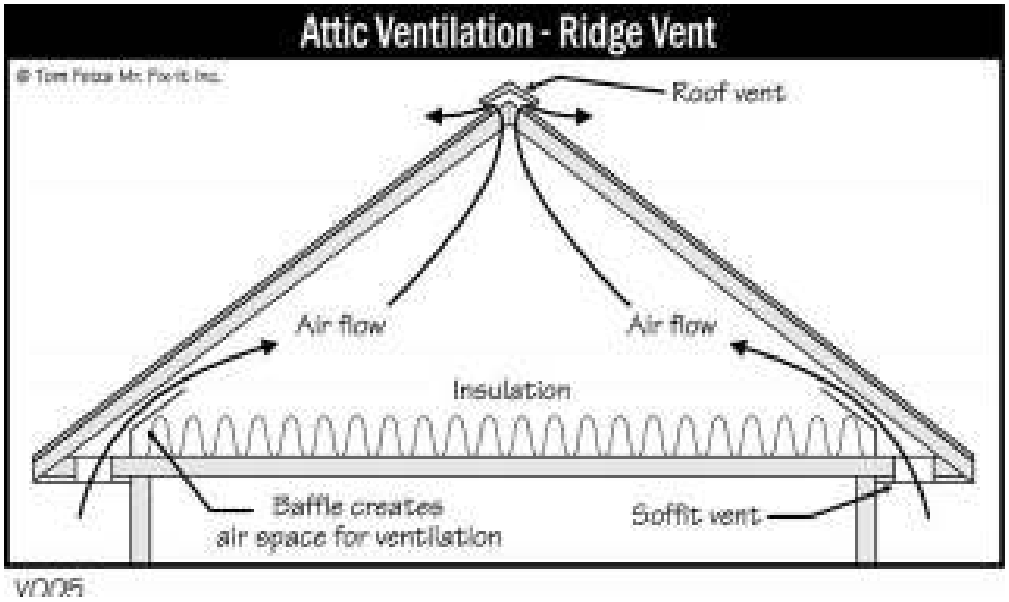
HQHUJ\ FRVWV IRU FRROLQJ DQG PD\ PDNH WKH URRPV EHORZ OHVV WKH OLIH RI VRPH U$RRVLQJ PRLVWXUH DSURGXFHG ZLWKLQ WKH KRPH P YDSRU EDUULHUV DUH QRW XVHG ,I WKLV PRLVWXUH LV QRW H[KDXV LQVXODWLRQ DQG FRQVWUXFWLRQ PDWHULDOV WR GHWHULRUDWH 7 PDMRU UHDVRQV IRU SURYLGLQJ DWWLF YHQWLODWLRQ



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2 EVHUYHG WKDWWKH IORRUV\ VWMP LV QRWLQVXODWHG XQGHUP RVWRI WKH KRXVH EXWLV LQVXODWHG XQGHUWKH DGGLWRQ ,I \ RX KDYH DQ RQHUKRP H DQG WKHUH LV QR IORRULQVXODWRQ LWV ONHO WKDWWZ DV WDNHQ RXWWR KHOS GLV RXWD WRR KXP LG HQYLURQP HQW) RU\ RXUUHI HUHQFH IORRULQVXODWRQ FDQ EHFRP H Z HWDQG IDQORYHUWP H +DQJLQJ IORRU LQVXODWRQ KLQGHUV FUDZ OVSDFH YHQWLODWRQ DQG Z KLFK FDQ LQFUHDVH WKH P RLVWXUH FRQWHQWRI WKH Z RRG DQG\ RX Z DQWWR NHHS WKH Z RRG DV GLV DV SRVVLEOH



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2 EVHUYHG WKDWWKHUH LV D YDSRUEDUULHU SODVWF RQ SDUWRI WKH JURXQG LQ WKH FUDZ OVSDFH) RU\ RXUUHI HUHQFH D YDSRUEDUULHUKHOSV WR NHHS P RLVWXUH DQG GDP SQHVV LQ WKH FUDZ OVSDFH DWD P LQLP XP WR SUHVHUYH WKH FRQGLWRQ RI WKH Z RRG DQG P DVRQLV FRP SRQHQW Z KLFK FRP SULVH WKH IRXQGDWRQ $GGLWRQDOO LWKHOSV SUHYHQWWKH KRXVH IURP VP HOOQJ P XVW : KHQ WKHUH LV H[FHVV P RLVWXUH LQ WKH FUDZ OVSDFH FRQGLWRQV DUH ULSH IRUWKH JURZ WK RI P RQG DQG P LQGHZ WKH GHFD\ IXQJ LZ KLFK OHDGV WR Z RRG URWDQG Z RRG HDWQJ LQVHFW 5 HFRP P HQG LQWDOOQJ D P LOSODWWF VKHHWRQ WKH UHVWRI WKH JURXQG LQ WKH FUDZ OVSDFH Z KHUH QHHGHG P DNLQJ VXUH WR RYHUODS VHDP V DQG KDYH LWH[WHQG XS HDFK Z DOOE\ LQFKHV 3 OHDVH UHI HUEDFN WR VHFWRQ IRUP RUH FRP P HQW UHJ DUGLQJ HQFDSVXODWRQ RI WKH FUDZ OVSDFH


No vapor barrier


none under the kitchen


Vapor barrier on part of the crawlspace ground













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2EVHUYHG WKDWRQH RUP RUH RI WKH VFUHHQV IRUWKH IRXQGDWLRQV YHQW DUH HLWKHUGDP DJHG RUDUH P LVVLQJ WKLV FDQ DOOZ SHVW VR HQWHUXQGHUWKH KRP H 5HFRP P HQG KDYLQJ D KDQG\ P DQ LQWDOOVFUHHQV IRUWKH IRXQGDWLRQ YHQW Z KHUH QHHGHG VR KHOS NHHS SHVW RXW



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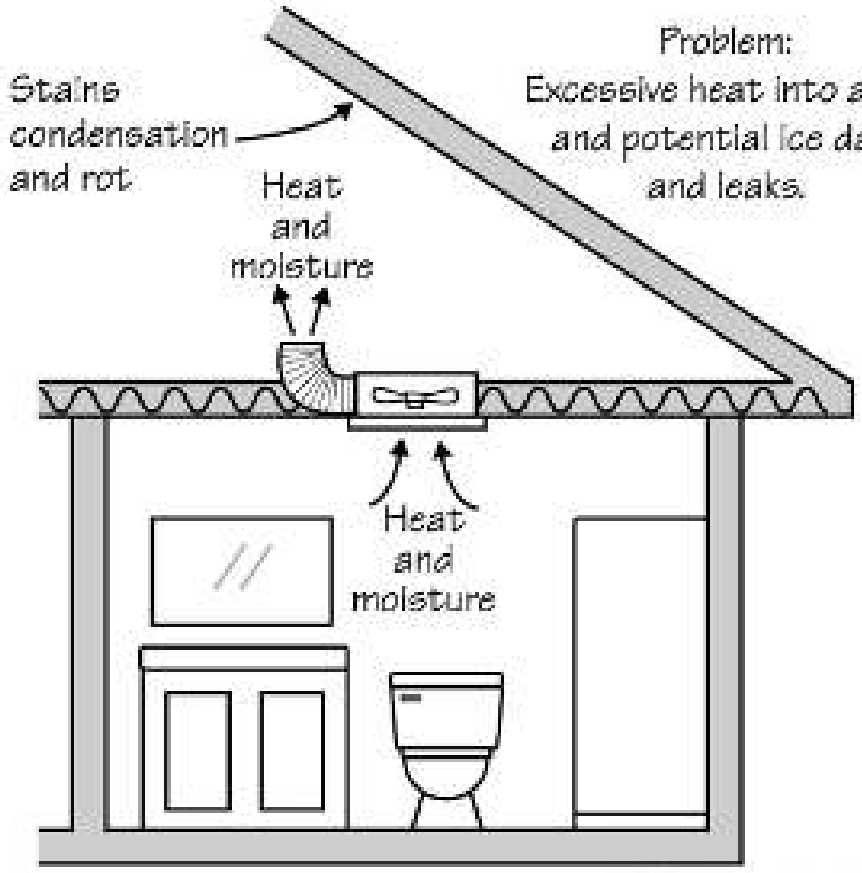
Bath Exhaust Fan into Attic



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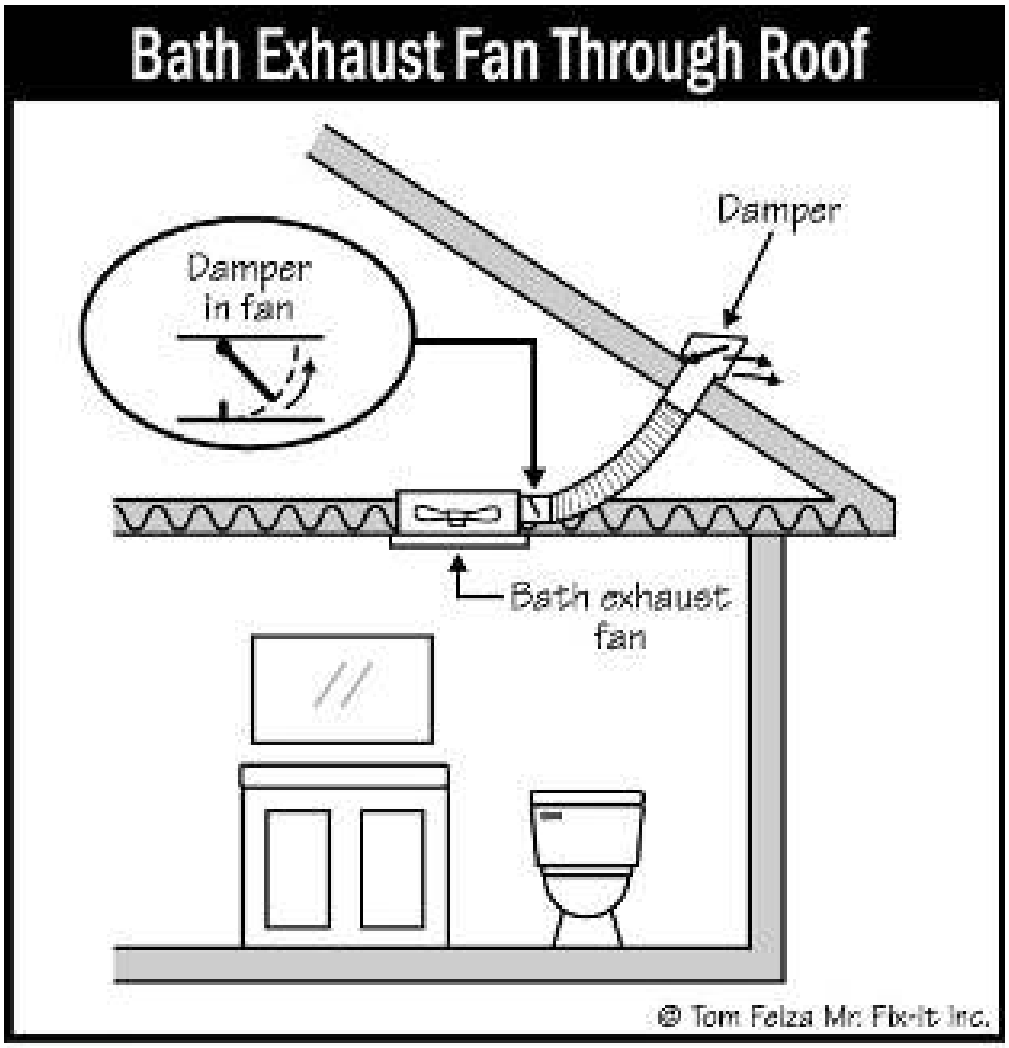
VOOB



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3 ⓗDVH UHI HUVR DWDFKHG GRFXP HQWHQWDOHG $ 6 + , 6 VDQGDUGV RI 3 UDFWLFH IRUUHYLHZ RI VKH VFRSH DQG QDWXUH RI VKLV KRP H LQVSHFWRQ DV LWDSSOLHV VR LQVXODWRQ DQG YHQWDWRQ 6 SHFLLFDOO VKH LQVSHFWRULV UHTXLUHG VR LQVSHFWLQVXODWRQ DQG YDSRU UHWDUGHUV LQ XQILQLVKHG VSDFHV YHQWDWRQ RI DWWFV DQG IRXQGDWRQ DUHDV NLWKHQ EDWKURRP ODXQGLV DQG VLP LODUH[KDXVWV\ VWMP V DQG FORVKHV GLV HUH[KDXVWV\ VWMP V 3 ⓗDVH QRWH VKH LQVSHFWRULV 1 2 7 UHTXLUHG VR GLVXUE LQVXODWRQ

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7KH LQVXODWRQ DQG YHQWDWRQ RI VKH KRP H Z DV LQVSHFWMG DQG UHSRUWMG RQ Z LWK VKH DERYH LQIRUP DWRQ : KLOH VKH LQVSHFWRUP DNHV HYHUV HIIRUWVR ILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ J R XQQRWFHG 9 HQWQJ RI H[KDXVWDQV RUFORVKHV GLV HUFDQQRWEH IXOO LQVSHFWMG DQG EHQGV RUREVWUKFWRQV FDQ RFFXUZ LWKRXWEHLQJ DFFHVVLEOH RUYLVLEOH EHKLQG Z DOODQG FHLOQJ FRYHULQJ V 2 QO LQVXODWRQ VKDWVV YLVLEOH Z DV LQVSHFWMG 3 ⓗDVH EH DZ DUH VKDWVKH LQVSHFWRUKDV \ RXUEHVWLQWMUHVWLQ P LQG $ Q\ UHSDLULWMP V P HQWRQHG LQ VKLV UHSRUWVKRXOG EH FRQVLGHUHG EHIRUH SXUFKDVH ,WLV UHFRP P HQGHG VKDWTXDOLLHG FRQWDFWRUV EH XVHG LQ \ RXU IXUVKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWMV VR VKH FRP P HQW LQ VKLV LQVSHFWRQ UHSRUW

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' XH WR WKH DJH RI WKLV KRXVH LW SRVVLEOH WKDW SRSFRUQ FHLOLQJ V DQG RUDQG FHLOLQJ WGH IL SUHVHQWP D\ FRQWDLQ DVEHVWRV JLYHQ WKDW WZ DV EXLOWEHIRUH RUVRP HWP H LQ WKH HDUO V GH WRY HUL QYHQWRUHV ZHUH QRW[FXGHG IURP DVEHVWRV EDQ ,I \RX Z DQ WR UHP RYH WKH SRSFRUQ WR FUHDWH D VP RRW FHLOLQJ UHFRP P HQG KDYLQJ \RXUFHLOLQJ WHVWHG IRU DVEHVWRV ILUVW WR HQVXUH WKH UHQRYDWLQQ GRHV QDW H[DVH P DQ&HLOLQJ V FDQ EH WHVWHG E\ D SURIHVVLRQDO RUYLD D GR LW\RXUVHOI,I \RX GR QRWSODQ WR UHP RYH WKH SRSFRUQ WKHQ WKH FHLOLQJ LV FRQVLGHUVDIH DV GHQJ DV LWV QRWGLVWXUEHG VXFK DV Z LWK UHSDLUV SDLQWHWV

) RU\ RXUUHIHUHQFH LWV QRWXQFRP P RQ WR ILQG DVEHVWRV LQ DFRXWLF FHLOQJ V LQWDOOHG LQ WKH V EHFDXVH H[LWLQJ LQYHQWRULHV Z HUH H[HP SWURP WKH EDQ ,I \ RX GR QRWSODQ WR UHP RYH WKH SRSFRUQ WKHQ WKH FHLOQJ LV FRQVLGHUVDIH DV ORQJ DV LWLV QRWGLVWXUEHG VXFK DV Z LWK UHSDLLV SDLQWHWR $ VEHVWRV FDQ EH HQFDSVXODWHG Z LWK D QHZ OD\ HURI QRQ DVEHVWRV DFRXWLF VSUD\ HG RYHUWKH WRS RI WKH H[LWLQJ FHLOQJ 7KLV LV WKH P RVWHFRQRP LFDOVRQXWRQ WR WKH DVEHVWRV ,I WKH FHLOQJ GRHV FRQWDLQ DVEHVWRV LWWKRXOG QRWEH SDLQWHG EHFDXVH UROOQJ RUVSUD\ LQJ FDQ UHOHDVH WKH KDUP IXOILEHUV LQWR WKH DLU Z KHUH WKH\ FDQ WKHQ EH LQKDOHG 3 DLQW LV QRWDQ HIILFLHQWZ D\ WR HQFDSVXODWH DVEHVWRV ILEHUV DFFRUGLQJ WR WKH (3$) RUP RUH LQI RUP DWRQ SOHDVH YLVLWWKH (3$ Z HEVLWH DWKWWS Z Z Z HSD J RY DVEHVWRV LQGH[KWP O





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’ XH VR VKH DJ H VKH KRP H SOHDVH QRWH LWLV ONHO VKDWVKH Z DOOY DQG FHLOQJ V KDYH OHDG SDLQWXQGHUUHFHQW OD\ HUV RI SDLQW7 KLV LV RQO P HQWRQHG LQ VKH HYHQWVKDW RX P D\ EH GRLQJ UHQRYDWRQ Z RUN RUZ LOOEH UHP RYLQJ VFUDSLQJ VKH SDLQWDQG RULL \ RX KDYH VP DOOFKLOOUHQ Z KR P D\ SXWVKHLUP RXVKV RQ Z LQGRZ VLOOY RU EDVHERDUGV LQ Z KLFK FDVH VKH SUHVHQFH RI OHDG SDLQWEHFRP HV D VDIHW KD] DUG $ V GHVLUHG VKH SDLQWFDQ EH VHVVHG HLVKHUE\ D SURIHVVLRQDORUD GR LW RXUVHOI NLW5 HFRP P HQG KDYLQJ D TXDOLLHG SDLQWQJ FRQWUDFVRU SURSHUO UHP RYH RUHQFDSVXODWH VKH ROG SDLQWDQG UHSDLQWI RUVDIHW 3 UIRUVR GHVHUP LQLQJ \ RXUFRXUVH RI DFWRQ VXJJ HVWGRLQJ VRP H UHVHDUFK DERXWOHDG SDLQW DQ LQVHUQHWVHDUFK Z LVK VKH NH\ Z RUGV UHP RYLQJ OHDG SDLQWURP Z DOOY Z LOOEULQJ XS D YDULHW RI DUWFOHV RQ VKH VRSLF

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2 EVHUYHG WKDWWKH EDFN H[WHULRUGRRUUXEV WKH Z RRG IORRUZ KHQ RSHQHG VLQFH WKH IORRULV QRWOHYHO 5 HFRP P HQG UHSDLULQJ WKH Z RRG IORRULQ WKLV DUHD RQFH WKH FUDZ OVSDFH UHSDLUV DUH FRP SOHWH



2 EVHUYHG WKDWWKHUH LV D VQJ KWWWS EHWZ HHQ WKH NLWKHQ DQG WKH RULJ LQDQJ DUDJ H Z KLFK P D\ FDXVH VRP HRQH P D\ WUS DQG IDOO 5 HFRP P HQG KDYLQJ D IORRULQJ FRQWDFWRUUHSDLUWKLV DUHD Z KHQ \ RX DUH KDYLQJ UHSDLUV GRQH WR WKH IORRU IRUVDIHW



Slight step between kitchen and original garage may cause someone to trip and fall





2 EVHUYHG WKH OYLQJ URRP IORRULV QRWOHYHO3 OHDVH UHIHUEDFN WR VHFWRQ IRUP RUH LQIRUP DWRQ DQG UHFRP P HQGDWRQV





’ XH WR WKH DJH RI WKLV KRP H SOHDVH QRWH LW SRVVLEOH WKDW RQH YLQ\ OQLQJ RFXP RUFHUDP LF IORRULQJ LL SUHVHQW WKURXJK WKH \ P D\ EH KLGGHQ XQGHUP RUH FXUHQWD\ HUV RI IORRULQJ VXFK DV LQ WKH NLWKHQ DQG EDWKURRP V P D\ FRQWDLQ DVEHVWRV HLWKHU WKH P DWHULDO WKH JURXWDQG RULQ WKH DGKHVLYH 9 LQ\ OIORRUWHV P DQXIDFWXUHG DV UHFHQW DV P D\ FRQWDLQ DVEHVWRV \$GGLWLRQDOO RQG ZRRG IORRULQJ P D\ FRQWDLQ HDG LQ WKH YDULQLK ,I WKH IORRUKDVQ WEEHQ VDQGHG VLQFH WKHUH V D JRRG FKDQFH WKH IORRUYDULQLK P D\ FRQWDLQ HDG ,Q P DQXIDFWXUHUV RI YDULQLK WRSSHG XVLQJ HDG EXW D JRRG UKEI RI WKXP E LV WR DOWZ IRUD VZR \ HDUVKHDOH RQ WKHVH SURGXFW ,I \ RX SDQ WR LQVWDOO ZLWK EHWWR VLP SO LQVWDOOLWRYHUWKH RGH[LWLQJ IORRULQJ VR WKDWWKH DVEHVWRV ILEHUV DUHQ WGLVWXUEHG ,I \ RX Z DQWR UHP RYH WKH FXUHQWDQG RULQDOD\ HUV RI IORRULQJ UHFRP P HQG FRQVXOWQJ Z LWK D SURIHVVLRQDO IORRUFRQWDFWRUWR HQVXUH WKH UHORYDWRQ LV GRQH LQ D VDIH P DQQHU) RUP RUH LQIRUP DWRQ DERXWDVEHVWRV LQ RQG IORRULQJ SOHDVH YLVLWWKH (3\$ Z HEVLWH DW KWWS Z Z Z HSD JRY DVEHVWRV LQGH[KWP O5 HJDUGLQJ Z RRG IORRUV UHFRP P HQG KDYLQJ WKH Z RRG IORRULQJ WWWWG IRUWKH SUHVHQFH RI OHDG SURRUWR UHILQLVKLQJ WKHP HVSHFLDOO LL \ RX SDQ WR GR LW RXUVHO) RUWKLV WKHUH DUH GR LW RXUVHO OHDG WWWWNLW DW RXUOHFDO RZ HV RU+ RP H ’ HSRWRUVP SO DVN D IORRULQJ FRQWDFWRUWR WWWWKH IORRUV IRU\ RX Z KLOH SURYLGLQJ DQ HVWP DW IRUWKH Z RUN

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& 2 8 1 7 (5 6 & \$ % , 1 (7 6 . L W F K H Q % D W K U R R P V
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2 EVHUYHG WKDWWKH VLQN FRXQWHUWRS WKH KDQGEDWKURRP LV WRR OXJH DQG WKH GRRUZ RQ WRSHQ FORVH DQWKH ZD\ 5HFRP P HQG UHSODFLQJ WKH VLQN YDQLW Z LWK RQH WKDW ZLOODOOZ WKH GRRUD IXOOSHQ FORVH VZLQJ Z KHQ \ RX KDYH D FKDQFH



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2 EVHUYHG P DQ\ RI WKH Z LQGRZ V GR QRW KDYH ORFNV 5 HFRP P HQG KDYLQJ D FRQWDFWRUDGGLQJ Z LQGRZ ORFNV Z KHUH QHHGHG IRUVDIHW



2 EVHUYHG WKDWWKHUH DUH VHYHQ Z LQGRZ V Z KLFK KDYH EURNHQ VHDOV FDXVLQJ WKHP WR KDYH D FORXG\ DSSHDUDQFH : KHQ WKH VHDOLV EURNHQ P RLVWXUH VHHSV LQ EHWZHHQ WKH SDQHV RI JODVV DQG FDXVHV FRQGHQVDWRQ $ GGLWRQDOO WKH LQVXODWLQJ SURSHUWLHV RI WKH Z LQGRZ DUH VLJQLLFDQWO UHGXFHG VR WKDWWWDFWV IXVW ONH D UHJXODUSLHFH RI JODVV 3 OHDVH QRWH , P D\ QRW KDYH EHHQ DEOH WR LGHQWLI\ DOOEURNHQ VHDOV VRP H DUH KDUG WR VHH GXH WR WP H RI GD\ DQG LL WKH Z LQGRZ V DUH GLUW $ V D UHVXOWUHFRP P HQG KDYLQJ D Z LQGRZ FRQWDFWRUHYDOXDWH WKH Z LQGRZ V IXUWKHUWR HQVXUH DOOEURNHQ VHDOV KDYH EHHQ LGHQWLLHG WKHQ UHSDLURUUHSODFH WKHVH Z LQGRZ V DV QHHGHG VR WKDWWKH\ DJDLQ KDYH D FOHDUYLHZ WR WKH RXWLGH DQG DUH LQVXODWHG WR KHOS FRQVHUYH HQHUJ\


Windows having a broken seal causing them to look cloudy


Broken seals





2 EVHUYHG WKDWWRP H RI WKH Z LQGRZ V LQ WKH KRP H DUH SDLQWHG VKXW WKLV LV D VDIHW FRQFHUQ VLQFH LW D JRRG LGHD WR KDYH DQ DOWHUQDWH HVFDSH URXWH LQ WKH HYHQWRI D ILUH 5 HFRP P HQG KDYLQJ D KDQG\ P DQ UHSDLUDW OHDVWRQH Z LQGRZ SHUEHGURRP IRUVDIHW



2 EVHUYHG WKDWWKH Z LQGRZ V DUH KDUG WR RSHQ ,W D JRRG LGHD WR KDYH RQH Z RUNLQJ Z LQGRZ SHUEHGURRP DV DQ DOWHUQDWH HVFDSH URXWH LQ FDVH RI ILUH 5 HFRP P HQG KDYLQJ D KDQG\ P DQ UHSDLUWKH Z LQGRZ V VR WKH\ RSHQ DQG FORVH HDVLO DV WKH\ VKRXOG

3 OHDVH UHIHUWR DWWDFKHG GRFXP HQWHQWWKG $6+, 6WDQGDUGV RI 3UDFWLFH IRUUHYLHZ RI WKH VFRSH DQG QDWXUH RI WKLV KRP H LQVSHFWRQ DV LWDSSOLHV WR LQWHUQDO VHFWLRQ 6SHFLILFDOO WKH LQVSHFWRULV UHTXLUHG WR LQVSHFWZ DQW FHLQJV IORRUV VWUVV WDLZ D\ UDLQJV FRXQWHUWRSV DQG DUHPHQWVDWH QXP EHURI LQWDOHG FDELQHW DQG DUHPHQWVDWH QXP EHUR GRRUV DQG ZLQGRZ V 3 OHDVH QRWH WKH LQVSHFWRULV 1 2 7 UHTXLUHG WR LQVSHFWSDLQWZ DQGSDSHU RWKHUILQLVKLQJ WHDWH HQW IORRUFRYHULQJ V ZLQGRZ WHDWH HQW FRDWQJV RQ DQG WKH KHUP HWF VHDO EHWZHHQ SDQHV RI ZLQGRZ JODVV FHQWDOYDXXP V\VWMP V DQG UHFUHDWRQDO IDFLOLWLHV

* HQHUDO/ LP LWDWRQV DQG ([FOXVLRQV
7KH LQVSHFWRULV 1 2 7 UHTXLUHG WR SHUIRUP DFWLRQV RUWR P DN H GHWHUPLQDWLRQV RUWR P DN H UHFRP P HQGDWLRQV QRWWSHFLILFDOO WDWHG LQ WKH 6WDQGDUGV RI 3UDFWH ,QVSHFWLRQV SHUIRUP HG XVLQJ WKLV 6WDQGDUG DUH QRWWFKQLFDOO H[KDXVWLYH QRWUHTXLUHG WR LGHQW\ DQG UHSRUWFRQFHDOHG FRQGLWLRQV OWHQWLDOVHIHFW FRQVHTXHQWDOGDP DJHV DQG FRVP HWF LP SHUHFWLRQV WKDWWR QRWWJQLFDQW DIIHFWWKH FRP SRQHQW SHUIRUP DQFH RI LW LQWHQGHG IXQFWLRQ

7KH LQWHUURRI WKH KRP H Z DV LQVSHFWG DQG UHSRUWHG RQ Z LW WKH DERYH LQIRUP DWLRQ : KLOH WKH LQVSHFWRUP DN HV HYHU HIIRUWR IILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ JR XQQRWFHG 7KH LQVSHFWRQ GLG QRWQOYRQH P RYLQJ IXUQLWXUH DQG LQVSHFWLQJ EHKLQG IXUQLWXUH DUHD UXJV RUDUHDV REWUFWHG IURP YLHZ 3OHDVH EH DZ DUH WKDWWKH LQVSHFWRUKDV \RXUEHVWLQWHUHVWV P LQG $Q UHSDLU LWP V P HQWRQHG LQ WKLV UHSRUWW KRXG EH FRQVLGHUHG EHIRUH SXUFKDVH ,WLV UHFRP P HQGHG WKDWTXDOLHG FRQWUFWRUV EH XVHG LQ\RXU IXUWKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWHV WR WKH FRP P HQW LQWKLV LQVSHFWRQ UHSRUW

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* DUEDJ H ’ LVSRVDO%UDQG
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2 EVHUYHG WKDWWKH GLVKZ DVKHUDSSHDUV WR EH Z RUNLQJ Z HOO LWZ DV UXQ RQ ULQVH F\ FOH WR WHVWWRUOHDNV) RU
\ RXUUHI HUHQFH WKH DYHUDJ H GLVKZ DVKHUZ LOODVWDERXW \ HDUV



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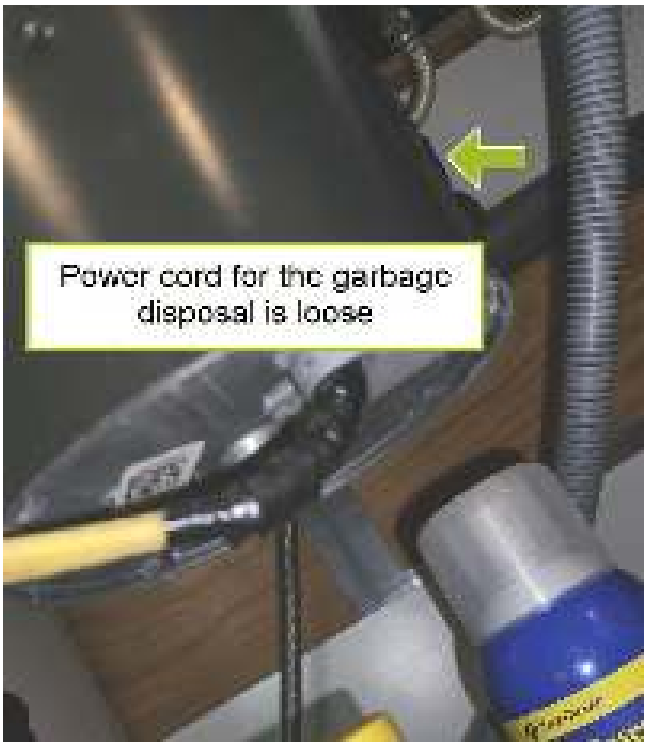
2 EVHUYHG WKH J DUEDJ H GLVSRVDOV SRZ HUFRUG LV ORRVH 5 HFRP P HQG KDYLQJ D FRQWDFWRUVHFXUH WKH SRZ HU
FRUG IRUWKLV XQLWI RUVDI HW



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& R P P H Q ,WQ W S H F W H G

2 EVHUYHG WKDWWKH RYHQ DQG FRRNWRS DSSHDUWR EH Z RUNLQJ Z HOO WKH \ Z HUH WHWWHG Z LWK D LQIUDUHG UHG WKHUP RP HWHUWR HQVXUH WKH \ DUH KHDWLQJ DV WKH \ VKRXOG 3 OHDVH QRWH , GLG QRWWHWWRUP D[LP XP WHP SHUDWXUH) RU \ RXUUHIHUHQFH WKH DYHUDJ H HOHFWUF UDQJ H Z LOODWWDERXW \ HDUV J DV UDQJ HV ODWWDERXW \ HDUV DQG WKH FRRNWRS Z LOODWWEHWZ HHQ DQG \ HDUV


Solid Ground Home Inspection
June 10, 2023 11:08 AM


Solid Ground Home Inspection
June 10, 2023 11:08 AM

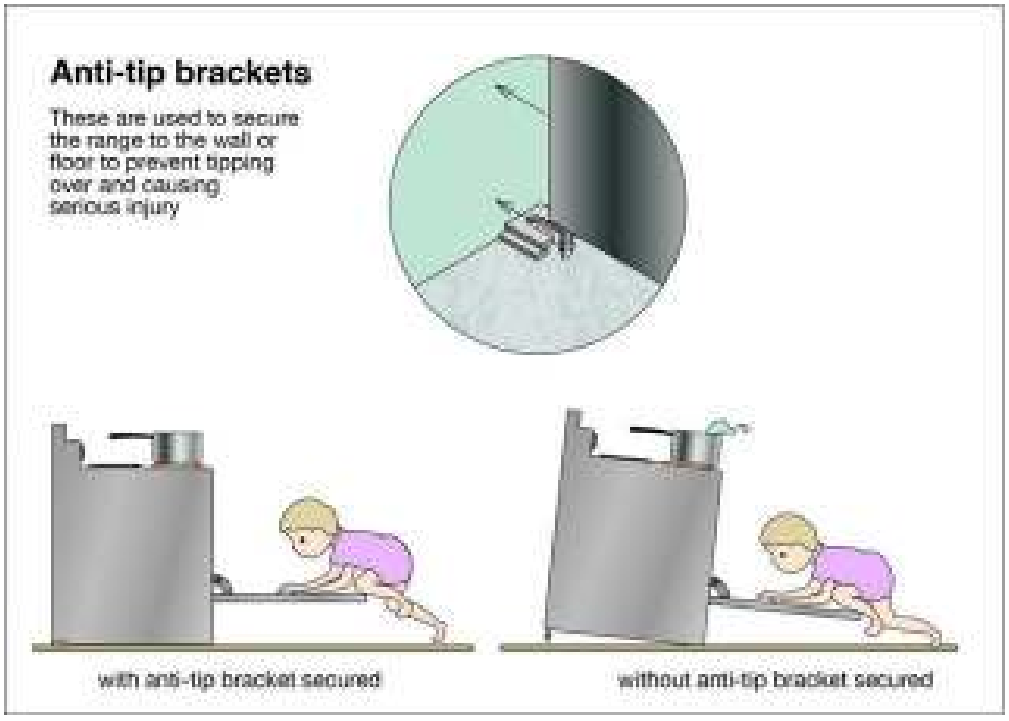

Solid Ground Home Inspection
June 10, 2023 11:08 AM





2 EVHUYHG WKDWWKH DQWLWLS EUDFNHWRUWKH WRYH LV QRWLQWDOOHG) RU\ RXUUHIHUHQFH WKLV EUDFNHWLV VHFXUHG WR WKH IORRUWKHQ WKH WRYH VOGHV LQWR WKH EUDFNHWVR LWGRHVQ WLS IRUZ DUG 5 HFRP P HQG KDYLQJ DQ DSSODQFH UHSDLUP DQ LQWDOODQ DQWLWLS EUDFNHWIRUVDIHW





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2 EVHUYHG WKH YHQWKRRG Z RUNV Z KHQ WHVWHG

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& R P P H Q ,WQW S H F W H G

2 EVHUYHG WKDWWKH P LFURZ DYH Z RUNV LWZ DV WHVWHG Z LWK D P LFURZ DYH WHVWHUWR HQVXUH LWLV RSHUDWLQJ SURSHUO DQG WKDWWKHUH DUH QR GRRUOHDNV) RU \ RXUUHIHUHQFH WKH DYHUDJH P LFURZ DYH OWW \ HDUV



5 ( ) 5 , * (5 $7 2 5
& R P P H Q ,WQ W S H F W H G

) RU \ RXUUHIHUHQFH WKH DYHUDJH UHIUJHUDWRUZ LOODWWEHWZHHQ DQG \ HDUV $ OVR WKH WMP SHUDWXUH LQVLGH WKH UHIUJHUDWRUVKRXOG EH NHSWEHWZHHQ DQG GHJUHHV) DQG QR P RUH WKDQ GHJUHHV IRUIRRG VDIHW 7KH IUHH] HUVKRXOG EH VHWDW GHJUHHV)

ROGHURUQHZ HUXQLW FDQ WMOO


Solid Ground Home Inspection
June 16, 2023 11:10 AM


47.5
Solid Ground Home Inspection
June 16, 2023 11:10 AM





2 EVHUYHG WKDW WKLV NLWFKHQ KDV RQH RUP RUH WDLQHG VWHOODSSODQFHV

7LS 6WDLQOHVV VWHHO LV DQ DOOR\ RI LURQ ZKLFK FRQWDLQV FKUR VWHSHVOD UHVXOW VWDLQOHVV VWHHO DSSOLDQFHV ZLOO RFFDVLRQD VNLQRV UHPRYH ILQJHUSULQWV \RXU FDYDQ VHHVYHH DPDL[FKXULHFHRXWR DS \RX KDYH KDUG ZDWHU RU GRQ W UHPRYH WKH VRDS FRPSOHWHO\ \RX FD EHVW ZD\ WR UHPRYH ILQJHUSULQWV LV WR XVH DQRWKHU LWHP IRX ZRUN 2OLYH RLO ZLOO UHPRYH ILQJHUSULQWV DQG VWUHDNV RQ VWHP QHHG WR XVH D ORW MXVW GDE D SDSHU WRZHO LQ ROLYH RLO DQG DSSOLDQFHV EH DPD]HG E\ WKH UHVXOWV ,I \RXU DSSOLDQFHV EHF \RX FDQ EULQJ EDFN WKHLU VKLQH E\ XVLQJ GHHJDDU GDEEHG RQWR EDFN WKH VKLQH RI VWDLQOHVV VWHHO ZKLOH DHJSDUR VWHDEVOLGDWKH[FHR DQG ZLOO KHOS UHPRYH VPXGJHV DQG RWKHU PDUNV WKDW PD\ VKRZ DQG WHDU

3OHDVH UHIHUWR DWWDFKHG GRFXPHQWDWLRQ $6+, 6WDQGDUGV RI 3UDFWLFH IRUUHYLHZ RI WKH VFRSH DQG QDWXUH RI WKLV KRPH LQVSHFWLRQ DV LWDSSOLHV WR EXLOWLQ DSSOLDQFHV 6SHFLILFDOO WKH LQVSHFWRULV UHTXLUHG WR LQVSHFWLQWDOHG RYHQV UDQJHV VXUIDFH FRRNLQJ DSSOLDQFHV P LFURZDYH RYHQV GLVKZDVKLQ P DFKLQHV DQG IRRG ZDVWH GLVSRVHUV E\ XVLQJ QRUP DOSHUDWLQJ FRQGLWLRQV DFWXDOO\ REVHUYHG DW WKH SUP DU IXQFWLRQ 3HDVH QRWH WKH LQVSHFWRULV 127 UHTXLUHG WR LQVSHFWLQWDOHG DQG IUHH VWDQGLQJ NLWFKHQ DQG ODXQGU DSSOLDQFHV QRWHG DERYH VXFK DV UHIULJHUDWRUV +RZHYHU ZH ZLOOEH KDSS\ WR WHVW WKH WHP SHUDWXUH LQVLGH WKH IULGJH DQG IUHH]HUDV D FRXUWHV\ $OVR ZH ZLOOCRWP RYH WKH IULGJH RXWRI SODFH WR LQVSHFWEHKLQG DSSOLDQFH WKHUP RVWDW LCFXGLQJ WKHLU FDOEUDWRQ DGHTXDF\ RI KHDWLQJ HQHP HQW VHOF FHDQLQJ RYHQ F\FOHV LQGLFDWRUOKW GRRUVHDO WP HUV FRFNV WP HG IHDXUHV DQG RWKHUVPFLDO[HG IHDXUHV RI WKH DSSOLDQFH RUPSHUDWLRQ FRQLUP WKH PSHUDWRQ RI HYU FRQWROODQG IHDXUH RI DQ LQVPFWG DSSOLDQFH

* HQHUDO/ LP LWDWRQV DQG ([FOXVLRQV
7KH LQVSHFWRULV 1 2 7 UHTXLUHG VR SHUIRUP DFWRQV RUVR P DNH GHWMUP LQDWRQV RUVR P DNH UHFRP P HQGDWRQV QRWVSHFLLFDOO VWDWMG LQ VKH 6 WDQGDUGV RI 3 UDFWFH ,QVSHFWRQV SHUIRUP HG XVLQJ VKLV 6 WDQGDUG DUH QRWWMFKQLFDOO H[KDXVWLYH QRWUHTXLUHG VR LGHQWV DQG UHSRUWFRQFHDOHG FRQGLWRQV OWMQWGHIHFW FRQVHTXHQWDOGDP DJHV DQG FRVP HWF LP SHUIHFWRQV VKDWGR QRWVLJ QLLFDQWO DIIHFWVKH FRP SRQHQW/ SHUIRUP DQFH RI LW LQWMQGHG IXQFWRQ

7KH EXLOWLQ DSSOODQFHV RI VKH KRP H Z HUH LQVSHFWMG DQG UHSRUWMG RQ Z LVK VKH DERYH LQIRUP DWRQ : KLOH VKH LQVSHFWRUP DNHV HYHU HIIRUWVR ILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ J R XQQRWFHG 3 OHDVH EH DZ DUH VKDWVKH LQVSHFWRUKDV \ RXUEHVWLQWMUHVWLQ P LQG $ Q\ UHSDLULWMP V P HQWRQHG LQ VKLV UHSRUWVKRXOG EH FRQVLGHUHG EHIRUH SXUFKDVH ,WLV UHFRP P HQGHG VKDWTXDOLLHG FRQWDFWRUV EH XVHG LQ \ RXUIXUVKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWMV VR VKH FRP P HQW LQ VKLV LQVSHFWRQ UHSRUW

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1RWYLVLEOH

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&DVWLURQ
&RSSHU
OHDG Z DWHU RQG

6 HZ HU&OHDQ 2 XW
3 UHVHQW LQ WKH FUDZ OVSDFH

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FOHDQ RXWSHUI RUP HG"
1 R Z DVQWUHTXHVWHG RUVHZ HUFOHDQ RXW
QRWSUHVHQW

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2 EVHUYHG WKDWWKH HOHFWUF Z DWHUKHDWHUL V \ HDUV RQG 3 OHDVH QRWH WKH KRWZ DWHUZ RUNV Z KHQ WHVWHG) RU
\ RXUUHI HUHQFH WKH DYHUDJ H Z DWHUKHDWHUOWW DERXW \ HDUV DQG VRP HWP HV OHQJ HU

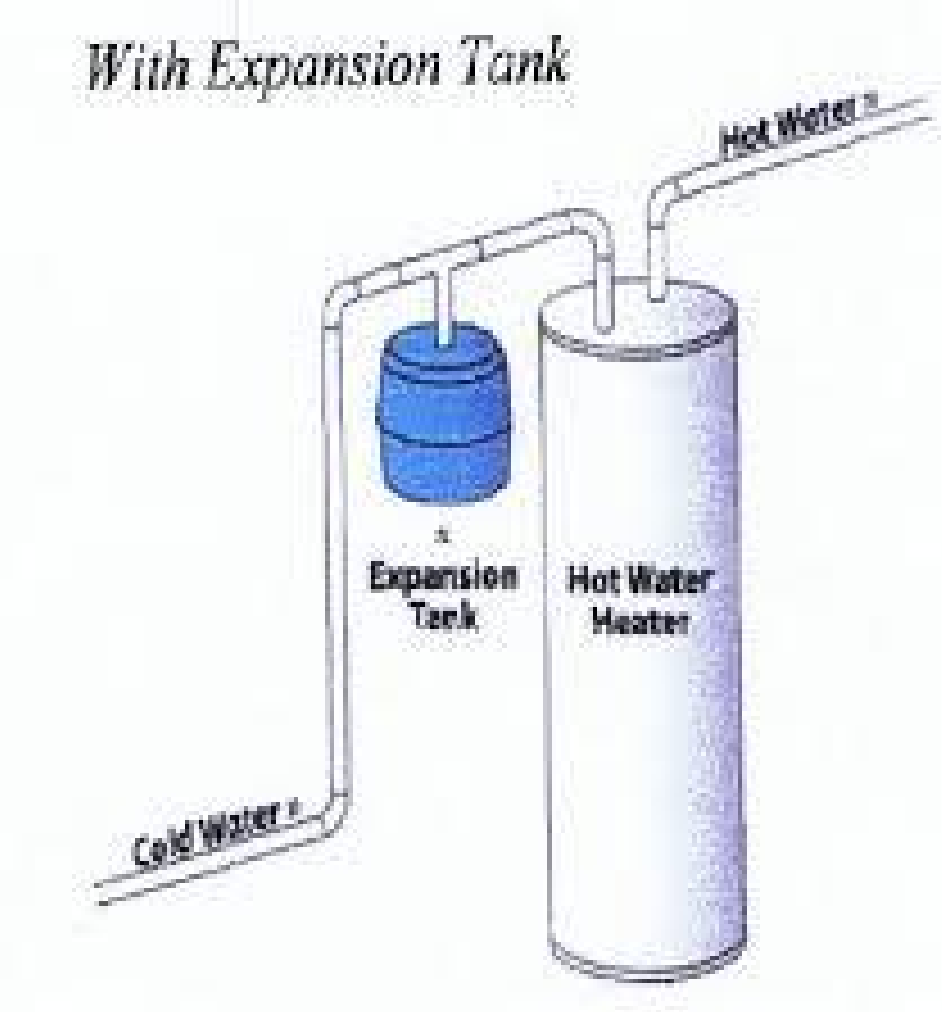




3 OHDVH QRWH WKH Z DWHUKHDWHUGRHV QRWKDYH D WKHUP DOH[SDQVLRQ WDQN) RU \ RXUUHI HUHQFH DQ H[SDQVLRQ
WDQN LV D FRP SRQHQWZ KLFK KHOSV WR SUHYHQWOHDNV DWWKH 7 5 3 WHP SHUDWXUH SUHVVXUH UHOHI YDOYH DQG DOOQHZ O

LQVWDOOHG KRWZDWHUKHDWHUV DUH UHTXLUHG WR KDYH WKHP 5HFRP PHQGHG KDYLQJ DQ DSSOLDQFH UHSDLUP DQ LQVWDOODQ H[SDQVLRQ WDQN IRUVDIHW





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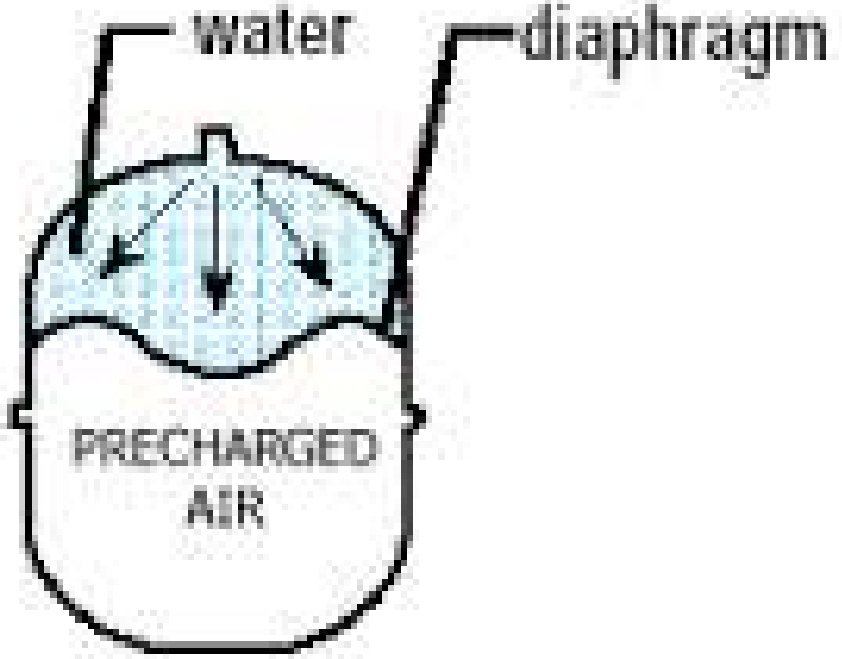

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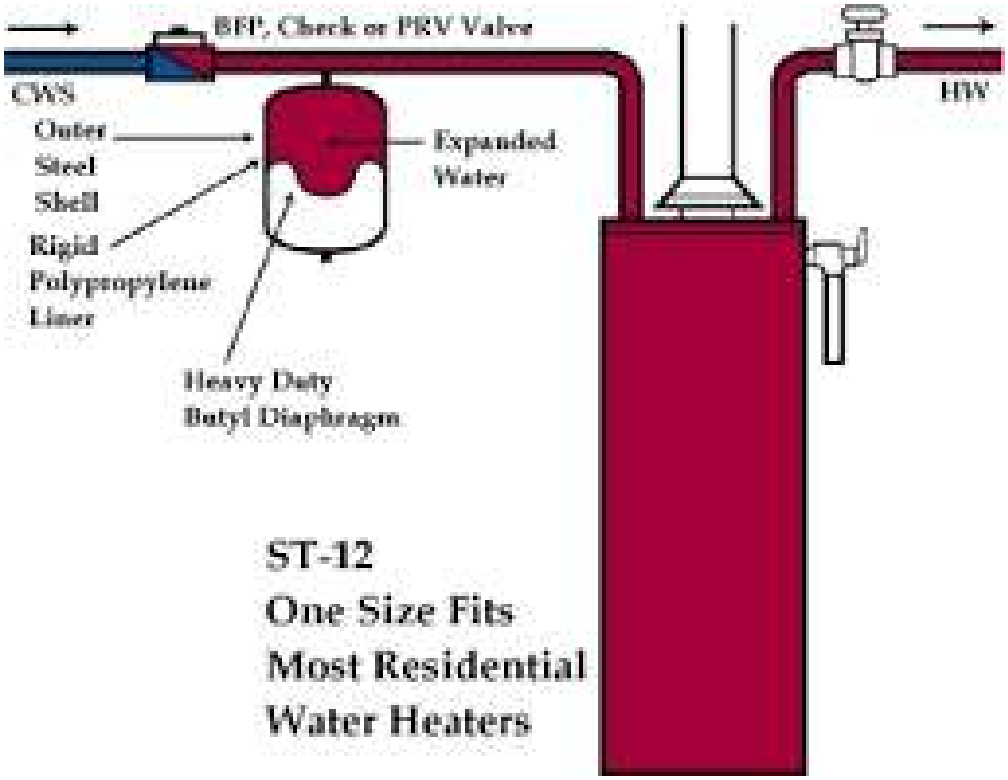

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VLWWQJ LQ D GUDLQ SDQ 5 HFRP P HQG KDYLQJ D FRQWDFWRULQWDOHDUWKTXDNH WWDSV DQG D GUDLQ GULS SDQ



2 EVHUYHG WKDWWKH Z DWMUKHDWMUV 7 3 5 YDOYH GUDLQ OQH GRHV QRWH[WMQG WR WKH H[WMULRU 5 HFRP P HQG KDYLQJ D SOXP EHUH[WMQG WKH GUDLQ OQH GRZ Q WR Z LWKLQ LQFKHV RI IORRUDQG WKHQ WR WKH RXWLGH RI WKH KRP H IRU VDIHW



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2 EVHUYHG WKDWWKH P DLQ Z DWMUVKXWRII LV ORFDWMG LQ WKH IURQW DUG DWWKH P HWMU ,I \ RX QHHG WR GR DQ \ SOXP ELQJ Z RUN LQ WKH KRXVH RULL RQH RI \ RXUSLSHV EUHDNV \ RX OQHHG WR NQRZ Z KHUH WR VKXWRII WKH Z DWMUVR UHSDLLV FDQ EH P DGH 5 HFRP P HQG SXUFKDVLQJ D Z DWMUNH \ DW- RP H ' HSRWRU / RZ HV WKLV LV DQ LQH[SHQVLYH LWMP OHVV WKDQ DQG Z LOOEH QHHGHG WR VXUQ WKH Z DWMURQ DQG RII

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&RPPHQ,WQW SHFWHG

2 EVHUYHG WKH DLUDGP LWDQFH YDOYH IRUWKH SOXP ELQJ LV LQ D ODXQGU URRP FDELQHW WKLV Z LOQRWDOORZ DLUWR HQWMUWKH YDOYH DQG WKXV Z RQWZ RUN DV LWWKRXOG 5 HFRP P HQG KDYLQJ D SOXP ELQJ P DNH WKH QHHGHG UHSDLUV



,QVLGH WKH FUDZ OVSDFH REVHUYHG WKDWWKH FDS IRUWKH ROG FDVWLURQ GUDLQ OQH LV FUDFNHG 5 HFRP P HQG UHSODFLQJ WKH FDS Z LWK D QHZ RQH WR SUHYHQWWHZ HUJ DVVHV IURP HQWMULQJ WKH FUDZ OVSDFH



3 OHDVH QRWH WKDWGXH WR WKH DJ H RI WKH KRP H LWLV ONHO WKDWWKH GUDLQ VHZ HUSLSHV UXQQLQJ IURP WKH KRP H WR WKH VWUHHWDUH FDVWLURQ RUR WKHUWSH P DWMUDO) RU\ RXUUHI HUHQFH FDVWLURQ GUDLQ OQHV KDYH EHHQ XVHG LQ EXLOGLQJ V IRUP RUH WKDQ \ HDUV DQG FDQ ODVWRU \ HDUV RUORQJ HU) RUWKRVH KRP HV Z KLFK DUH DERXW \ HDUV ROG LW J RRG WR QRWH WKDWWKH GUDLQ VHZ HUOQHV P D\ QHHG UHSDLURUUHSODFHP HQW$ V D UHVXOWLWZ RXOG EH Z LVH WR DVN WKH KRP H VHOHULL WKH SOXP ELQJ KDV HYHUEDFNHG XS DQG QHHGHG D SOXP EHUIRUUHVROXWLRQ

$ GGLWRQDOO LL WKHUH DUH ODUJH WUHHV LQ WKH \ DUG DV LV FRP P RQ IRUDQ ROGHUKRP H WKHUH V D SRVVLELOW WKDWWUHH URRWV KDYH LQYDGHG WKH VHZ HUOCH DQG P D\ FDXVH D SOXP ELQJ VWRSSDJ H LQVLGH WKH KRP H 7 KDWVDLG WKHUH LV QR Z D\ WR NQRZ WKH FXUUHQWFRQGLWRQ RI WKH VHZ HUSLSH VLQFH LWLV XQGHUJ URXQG XQOHVV D VHZ HUOCH LQVSHFWRQ LV SHUIRUP HG WKLV LV D YLGHR FDP HUD Z KLFK LV LQVHUWHG LQWR WKH VHZ HUFOHDQ RXWDQG WKHQ H[WHQGV GRZ Q WKUX WKH VHZ HUOCH WDNLQJ SKRWRV DQG YLGHR + RZ HYHU WKLV LV EH\ RQG WKH QRUP DOVFRSH RI WKH KRP H LQVSHFWRQ 7 KDWVDLG Z H QRZ KDYH WKH DELOW WR SHUIRUP WKH VHZ HUOCH LQVSHFWRQ IRUDQ DGGLWRQDOIHH IXVWDVN \ RXU KRP H LQVSHFWRU 2 WKHUZ LVH GXULQJ \ RXULQVSHFWRQ Z H Z LOOGR RXUEHVWWR GHWHUP LQH LL WKHUH LV D FXUUHQW SOXP ELQJ VWRSSDJ HV E\ UXQQLQJ WKH Z DWHUDQG IOXVKLQJ WKH WRLOHW KRZ HYHUWKLV LV QRWD GHILQLWLYH WHVW (VSHFLDOO LL WKH KRXVH LV YDFDQWUHFRP P HQG KDYLQJ D SOXP EHUHYDOXDWH WKH GUDLQ DQG VHZ HUOCHV IXUWKHUYLD D VHZ HUVFRSH LH D VHZ HUOCH LQVSHFWRQ DQG WKHQ UHSDLURUUHSODFH WKH SLSHV DV QHHGHG 7 KLV LV P DUNHG DV D P LQRU UHSDLUGXH WR WKH FRVWRI D VHZ HUVFRSH KRZ HYHULWZ LOOEH D VLJ QLLFDQWH[SHQVH WR UHSODFH WKH GUDLQ DQG VHZ HUSLSHV $ GGLWRQDOO Z H VXJ J HVWSXUFKDVLQJ DQ LQH[SHQVLYH RQ J RLQJ Z DUUDQW WKUX \ RXUXWLOW FRP SDQ\ + RP H6 HUYH IRUGUDLQ DQG VHZ HUOCH UHSDLUUHSODFHP HQW







* RRG VR NQRZ ' RP LQLRQ (CHUJ \ KDV ERVK D 6 HZ HU/ LQH DQG : DVMU6 XSSO / LQH 5 HSDLU5 HSODFHP HQW 3 URJ UDP IRUD OR Z IHH HDFK P RQVK IXVWDGGHG VR \ RXUSRZ HUELOO 7 KLV LV HVSHFLDOO KHOSIXOL \ RX UH EX\ LQJ DQ ROOHUKRP H Z LVK ROG GUDLQ OQHV) RUP RUH LQIRUP DWRQ YLVLWVFHJ FRP SURGXFWDQG UHSDLUSODQV

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& R P P H Q ,WQW S H F W H G

) RU \ RXUUHIHUHQFH SOHDVH QRWH VKH VHZ HUFOHDQ RXWLV OR FDWHG LQ VKH FUDZ OVSDFH 7 KLV LV J RRG VR NQRZ LQ VKH HYHQWVKDW RX QHHG D SOXP EHUVR XQFORJ \ RXUVHZ HUOQH DWVRP H SRLQW

3 OHDVH QRWH VKDWZ H GLG QRWSHUIRUP D VHZ HUVFRSH IRUVKLV KRP H HLVKHUEHFDXVH VKH KRP H EX\ HUGLG QRW UHTXHVWLVRUEHFDXVH Z H FRXOQQ WOR FDWH D VHZ HUFOHDQ RXWRQ VKH H[VMUIRU $ V D UHVXOW, GLG QRWYLVXDOO LQVSHFWVKH VHZ HUOQH Z KLFK UXQV IURP VKH KRXVH VR VKH VWUHHW,I \ RX Z RXOG ONH VR KDYH LWGRQH DQG VKHUH LV DQ H[VMUIRUFOHDQ RXWIXVWOHWP H NQRZ DQG Z H DUH KDSS\ VR UHVXUQ VR VKH KRXVH

3 / 8 0 % , 1 * ' 5 $, $ 6 7 : (9 (1 7 6 < 6 7 (0 6 . , 7 & + (1
& R P P H Q ,WQW S H F W H G

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& R P P H Q ,WQW S H F W H G

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& R P P H Q ,WQW S H F W H G

2 EVHUYHG VKDWVKH VRLOHW LQ VKH KDOODQG P DVMUEDVKV DUH OR RVH Z KHUH VKH \ FRQQHFWVR VKH IOR RU VKLV LV YHU FRP P RQ) RU \ RXUUHIHUHQFH D OR RVH VRLOHWERZ OP D \ UHVXOWLQ D OHDN DWVKH Z D[ULQJ DQG RUDWVKH VXSSO SLSLQJ FRQQHFWVRQ Z KLFK FDQ GDP DJ H VKH IOR RUDQG VXE IOR RUEHOR Z 5 HFRP P HQG KDYLQJ D KDQG \ P DQ WJ KWMQ VKH IOR RUEROW VR VKH VRLOHW DUH SURSHUO VHFXUH


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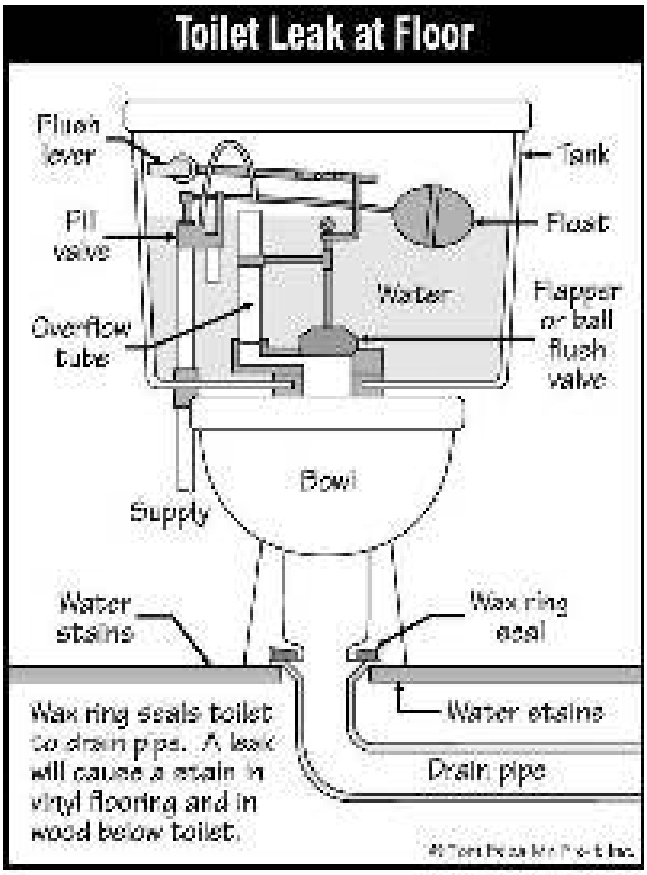
Toilet is loose



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&RPPHQ,WQW SHFWHG

2 EVHUYHG WKDWWKH ZDWHUVXSSO\ SLSHV DUH 3(;

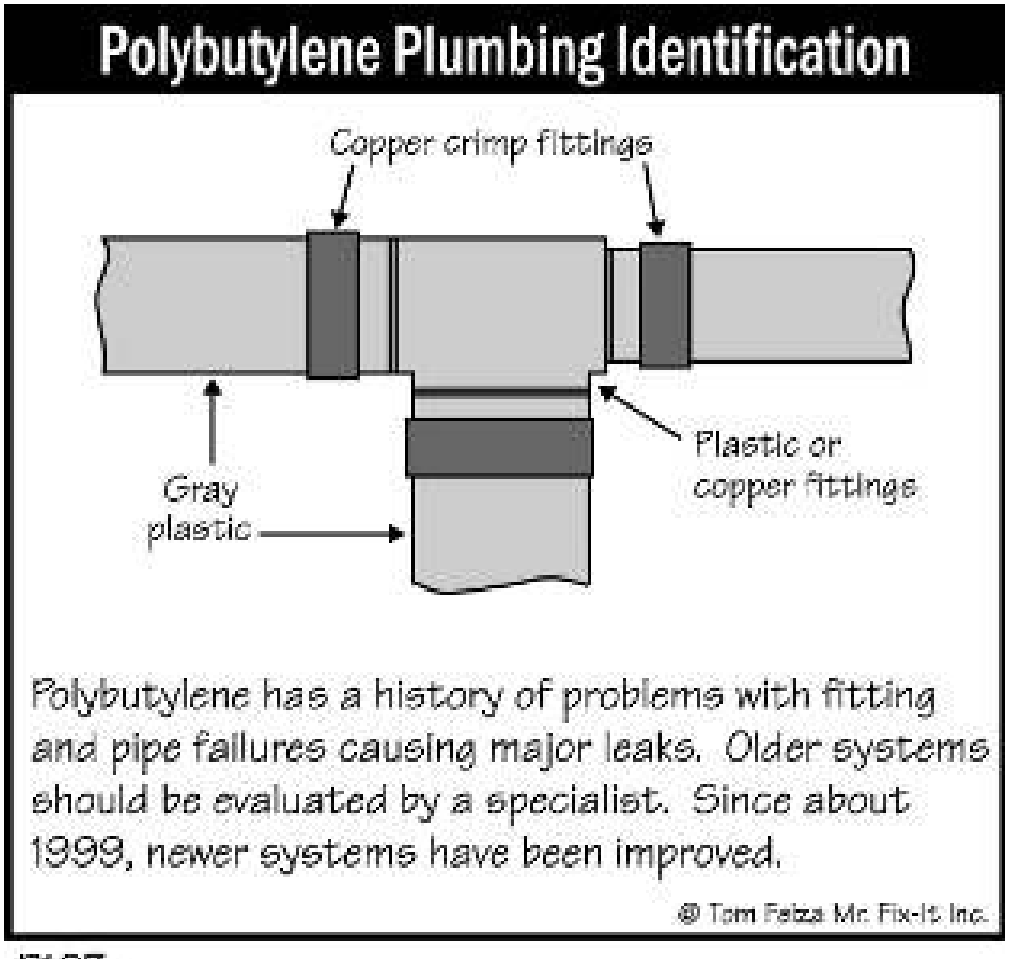
*RRG WR NQRZ 3(; RU FURVVOLQNHG SRO\HWK\OHQH LV SDUW RI D
DGYDQWDJHV RYHU PHWDRQ SLSHD GFRSSHU ULJLG SODVWLF SLSHV 3,9& LX3
UHVLVWDQW WR VFDOH DQG FKORULQH GRHVQ W FRUURGH RU GHYHO
SODVWLF DQG KDV IHZHU FRQQHFWRQ DQGWLWWKLQVFDOH EXLOG X
FRSSHU SLSH DQG GRHV QRW SLW RU FRUURGH ZKHQ FRSSHU UHWLVWD
EUHDNDJH WKDQ FRSSHU RU ULJLG SODVWLF SLSH 3(; WXEHQG VGRHV
FRQVHUYHV:DWHUJ\ORZV PRUH TXLHWO\ WKURXJK 3(; WXEH DQG WKH
RI FRSSHU SLSH V\VWHPV LV YLUWXDOO\ HOLPLQDWHG



2 EVHUYHG WKDWWKLV KRP H DOVR KDV FRSSHUSOXP SLQJ Z DWMUVXSSO SLSHV ,I \ RX KDYH DQ ROGHUKRP H EXLOW SULRUWR SOHDVH EH DZ DUH WKDWZ KLOH FRSSHUSLSHV GRQWFRQWDLQ OHDG WKH \ P D\ KDYH EHHQ LQWDOOHG Z LWK VROGHURUILWWQJ V Z KLFK P D\ FRQWDLQ OHDG VP DOODP RXQW RI Z KLFK FDQ VHHS LQWR WKH KRP H V WDS Z DWMU 7 KH RQO Z D\ WR NQRZ IRUVXUH LL WKHUH DUH XQVDIH OHYHOV RI OHDG LQ \ RXUGULQNLQJ Z DWMULV WR KDYH \ RXUZ DWMUWMWMG 5 HFRP P HQG UHDGLQJ P RUH DERXWGULQNLQJ Z DWMUDWKWS Z DWMUHSD J RY GULQN J XLGH WKHQ \ RX P D\ Z DQWWR FRQVLGHUKDYLQJ \ RXUZ DWMUWMWMG HVSHFLDOO LL \ RX KDYH FKLOGUHQ IRUVDIHW



2 EVHUYHG WKDWWKLV KRP H KDV JUD\ SRO EXWOHQH SODVWF SOXP ELQJ VXSSO OQHV 3 %) RU\ RXUUHIHUHQFH SRO EXWOHQH KDV EHHQ XVHG LQ WKLV DUHD IRUP DQ\ \ HDUV EXWKDV KDG D KLJ KHUWKDQ QRUP DOIDLOXUH UDWM DQG LV QR OHQJ HUZ LGHO XVHG 2 YHUWP H WKH SLSH FDQ UHDFWZ LWK FKORULQH LQ Z DWMUDQG FRXOG OHDN RUEUHDN ,Q WKLV KRXVH FRSSHUILWWQJ V DUH XVHG Z LWK WKH 3 % SLSLQJ Z KLFK KDYH EHHQ NQRZ Q WR LP SURYH LW SHUIRUP DQFH) RU P RUH LQIRUP DWRQ SOHDVH YLVLWWKH Z HE DWZ Z Z SRO EXWOHQH FRP SRO KWP ORUZ Z Z SESLSH FRP 5 HFRP P HQG P RQLWRULQJ \ RXUSOXP ELQJ IRUSRVVLEOH SUREOHP V RUOHDNV DV \ RX Z RXOG DQ RWKHUKRXVH



P103

SROE

3/80%,1* $7:(5 6833&/),;785(6 .,7&+(1
&RPPHQ,WQW SHFWHG

3/80%,1* $7:(5 6833&/),;785(6 7%+$5220
&RPPHQ,WQW SHFWHG

3/80%,1* $7:(5 6833&/),;785(62,7/(76
&RPPHQ,WQW SHFWHG

2 EVHUYHG WKDWWKH WRLOHWLQ WKH SULYDWH EDWK GRHV QRWKDYH D KDQGOH 5 HFRP P HQG UHSDLU





3/80%,1* +26(%,%6
&RPPHQ,WQW SHFWHG

3 OHDVH UHIHUWR DWWDFKHG GRFXP HQWHQWWKHG $6+,6 WDQGDUGV RI 3 UDFWLFH IRUUHYLHZ RI WKH VFRSH DQG QDWXUH RI WKLV KRP H LQVSHFWRQ DV LWDSSOLHV WR SOXP ELQJ 6 SHFLLLFDOO WKH LQVSHFWRULV UHTXLUHG WR LQVSHFWLQWUURUZ DWMUVXSSO DQG GLWWEXWRQ V\ VWMP V LQFOXGLQJ ILL[WXUHV DQG IDXFHW LQWMURUGUDLQ Z DWM DQG YHQW\ VWMP V LQFOXGLQJ ILL[WXUHV Z DWMUKHDWQJ HTXLSP HQWDQG KRW Z DWMUVXSSO V\ VWMP V YHQW\ VWMP V IOXHV DQG FKLP QH\ V IXHOWRUDJ H DQG IXHOGLWWEXWRQ V\ VWMP V VHZ DJ H HMIFWRUV VXP S SXP SV DQG UHODWMG SLSLQJ 3 OHDVH QRWH WKH LQVSHFWRULV 1 2 7 UHTXLUHG WR LQVSHFWFORWKHV Z DVKLQJ P DFKLQH FRQQHFWRQV LQWMURUV RI YHQW\ VWMP V IOXHV DQG FKLP QH\ V WKDWDUH QRWUHDGLO DFFHVVLEOH Z HOO Z HOOSXP SV Z HOOWRUDJ H UHODWMG HTXLSP HQWZ DWMU FRQGLWRQLQJ V\ VWMP V VRODU J HRWKHUP DODQG RWKHUUHQHZ DEOH HQHUJ\ Z DWMUKHDWQJ V\ VWMP V P DQXDODQG DXWRP DWF ILUH H[WQJ XLVKLQJ DQG VSULQNOHUV\ VWMP V DQG ODQGVFDSH LUUJ DWRQ V\ VWMP V VHSWF DQG RWKHUVHZ DJ H GLVSRVDOV\ VWMP V $ OVR QRWH WKH LQVSHFWRULV 1 2 7 UHTXLUHG WR GHWMUP LQH Z KHWKHUZ DWMUVXSSO DQG VHZ DJ H GLVSRVDODUH SXEOF RUSULYDWH Z DWMUTXDOW WKH DGHTXDF\ RI FRP EXWWRQ DLUFRP SRQHQW P HDVXUH Z DWMUVXSSO IORZ DQG SUHVVXUH Z HOZ DWMUTXDOW RUILOVKRZ HUSDQV DQG ILL[WXUHV WR WMVWRUOHDNV

* HQHUDO/ LP LWDWRQV DQG ([FOXVLRQV
7KH LQVSHFWRULV 1 2 7 UHTXLUHG VR SHUIRUP DFWRQV RUVR P DNH GHWMUP LQDWRQV RUVR P DNH UHFRP P HQGDWRQV QRWVSHFLLFDOO VWDWMG LQ VKH 6 WDQGDUGV RI 3 UDFWFH ,QVSHFWRQV SHUIRUP HG XVLQJ VKLV 6 WDQGDUG DUH QRWWMFKQLFDOO H[KDXVWLYH QRWUHTXLUHG VR LGHQWV DQG UHSRUWFRQFHDOHG FRQGLWRQV OWMQWGHIHFW FRQVHTXHQWDOGDP DJHV DQG FRVP HWF LP SHUIHFWRQV VKDWGR QRWVLJQLLFDQWO DIIHFWVKH FRP SRQHQW/ SHUIRUP DQFH RI LW LQWMQGHG IXQFWRQ

7KH SOXP ELQJ LQ VKH KRP H Z DV LQVSHFWMG DQG UHSRUWMG RQ Z LW VKH DERYH LQIRUP DWRQ : KLOH VKH LQVSHFWRUP DNHV HYHU HIIRUWVR ILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ J R XQQRWFHG : DVKLQJ P DFKLQH GUDLQ OCH IRUH[DP SOH FDQQRWEH FKHFNHG IRUOHDNV RU VKH DELOW VR KDQGOH VKH YROXP H GXULQJ GUDLQ F\ FOH 2 OCHUKRP HV Z LW J DOYDQ] HG VXSSO OCHV RUFDVWUURQ GUDLQ OCHV FDQ EH REVWUXFWMG DQG EDUHO Z RUNLQJ GXULQJ DQ LQVSHFWRQ EXWWKHQ IDLOY XQGHUKHDY\ XVH ,I VKH Z DWMULV VXUCHG RII RUQRWXVHG IRUSHUIRGV RI WP H OINH D YDFDQWKRP H Z DLWQJ IRUFORVLQJ UXVWRUGHSRVLW Z LWKLQ VKH SLSHV FDQ IXUWKHUFORJ VKH SLSLQJ V\ VWMP 3 OHDVH EH DZ DUH VKDWVKH LQVSHFWRUKDV \ RXUEHVWLQWMUHVWLQ P LQG $ Q\ UHSDLULWMP V P HQWRQHG LQ VKLV UHSRUWVKRXOG EH FRQVLGHUHG EHIRUH SXUFKDVH ,WLV UHFRP P HQGHG VKDWTXDOLLHG FRQWDFWRUV EH XVHG LQ\ RXUIXUWKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWMV VR VKH FRP P HQW LQ VKLV LQVSHFWRQ UHSRUW

‹(OHFWUJFDO

6WOHV 0 DWHULDOV

(OHFWULFDO6 HUYLFH & RQGXFWRUV
2 YHUKHDG VHUYLFH $ OXP LQXP
YROW

(OHFWULFDO3 DQHO7\ SH
& LUFXLWEUHDNHUV

0 DLQ 3 RZ HU6 KXW2 II / RFDWRQ
$ WWKH SDQHO

(OHFWULFDO2 XWOHW * URXQGHG"
6 RP H RXWOHW DUH JURXQGHG VRP H
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*) &, 2 XWOHW RFDWRQV
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5 RP H[WWOH 1 0 & Z LUH Z LWK D JURXQG
1 RQ 0 HWDOOF & RYHUHG & DEOH SUH V QRQ
JURXQGHG Z LUHV

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1 RQH QRWXVHG LQ D KRP H RI WKLV DJH

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& R P P H Q ,WQW S H F W H G

2 EVHUYHG WKDWWKH RYHUKHDG VHUYLFH HQWUDQFH FRQGXFWRU Z KHUH WKH SRZ HUHQWHUV WKH KRP H IURP WKH VWUHHW
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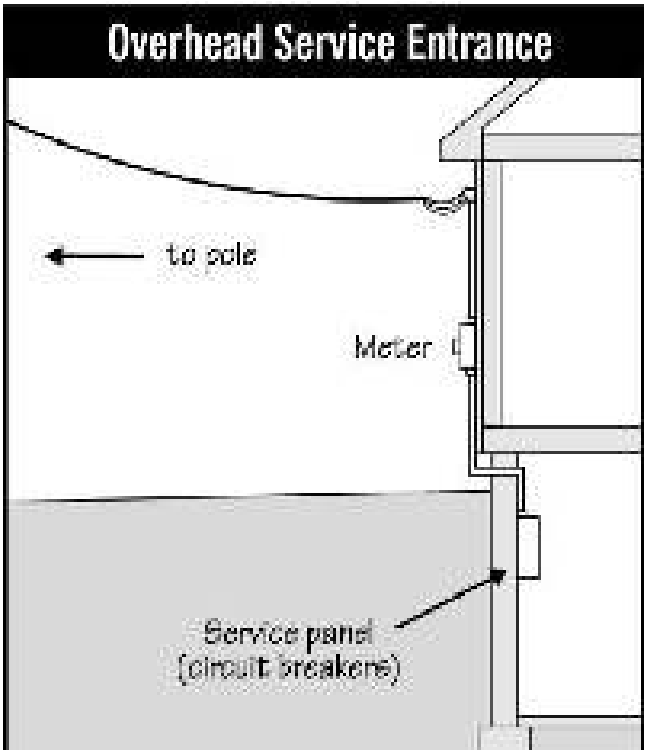



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& R P P H Q ,W Q W S H F W H G

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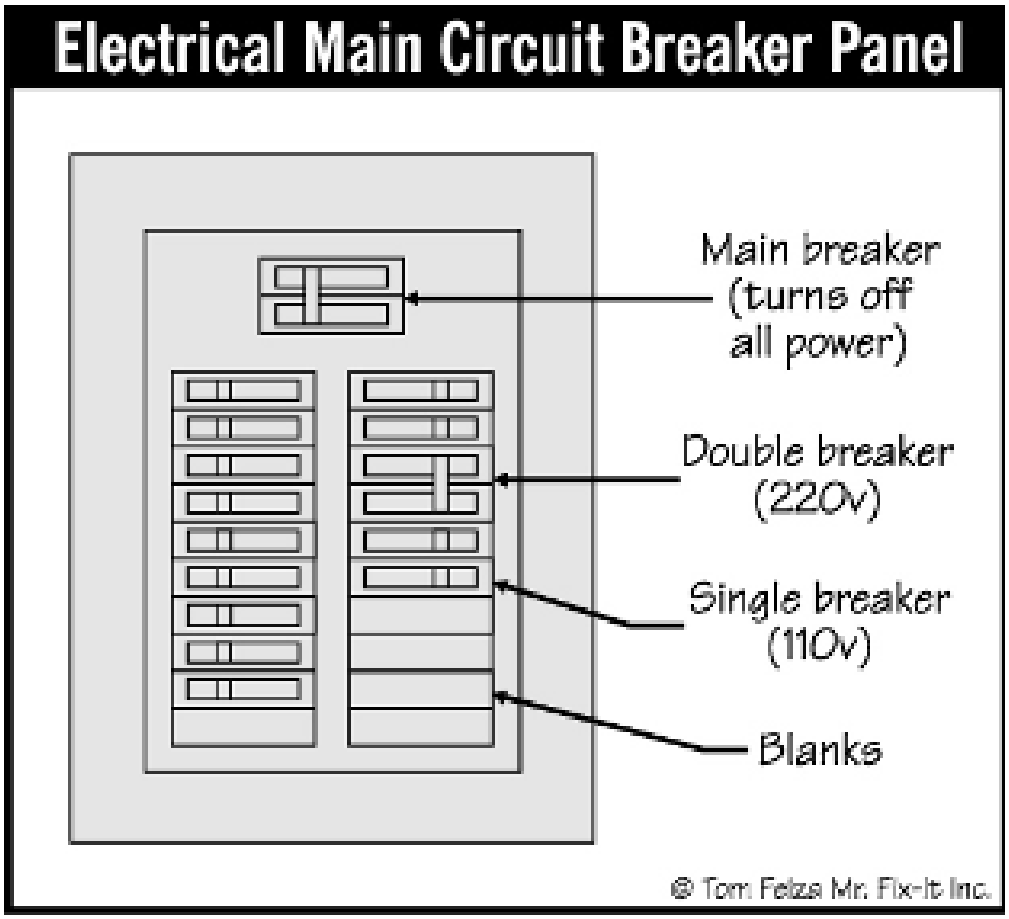
KHOSIXOWR NQRZ Z KHUH WKH P DLQ EUHDNHU LV LQ FDVH \ RX QHHG WR WXUQ RII WKH SRZ HUIRUWKH Z KROH KRP H



E002

*5281' 52'
&RPPHQ1WRW ,QVSHFWHG

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&RPPHQ,WQW SHFWHG

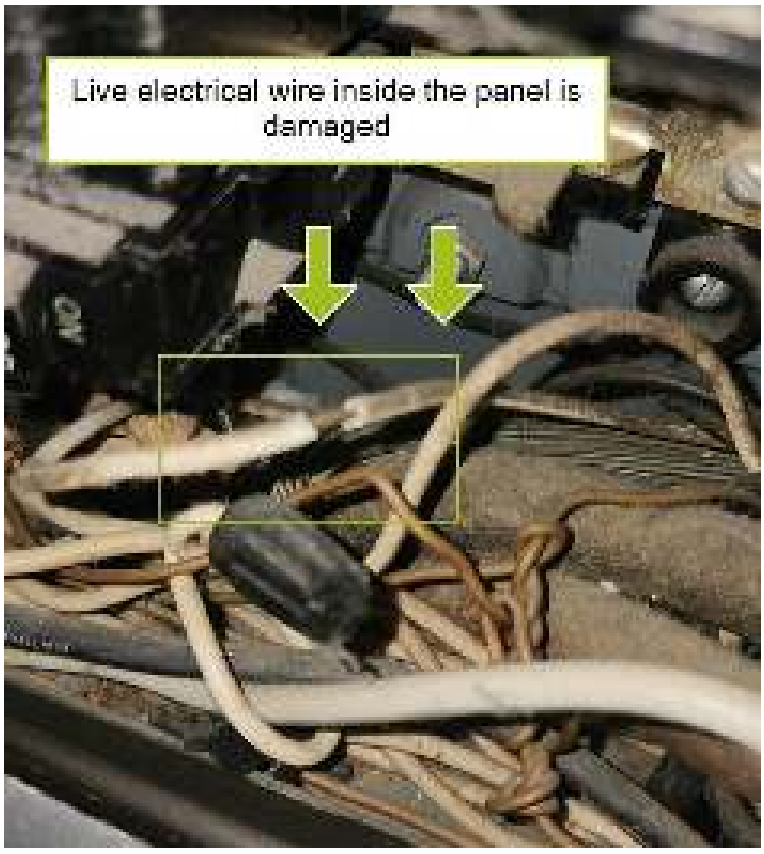
3OHDVHQRWHWKDWWKHHOHFWUFDOSDQHOLVRUJLQDOWRWKHKRPH'XHWRDJHDQGFRQGLWRQUHFRPPHQG FRQVXOWQJZLWKDQHOHFWUFLDQDERXWJRLQJDKHDGDQGUHSODFLQJWKHPDLQSDQHOZLWKDPRGHUQRQHWKDW LQFOXGHV*)&,DQG$)&,EUHDNHUV$GGLWRQDOOWKHHOHFWUFLDQFDQXSGDWHWKHZLULQJVRWKDWWKHRXWOHWDUHDOO JURXQGHGIRUVDIHW3OHDVHQRWHWKLVZLOOEHDVLJQLLFDQWH[SHQVH

2EVHUYHGWKHLQVLGHRIWKHHOHFWUFDOSDQHO


Main power shut-off
Solid Ground Home Inspection
June 16, 2023 12:01 PM



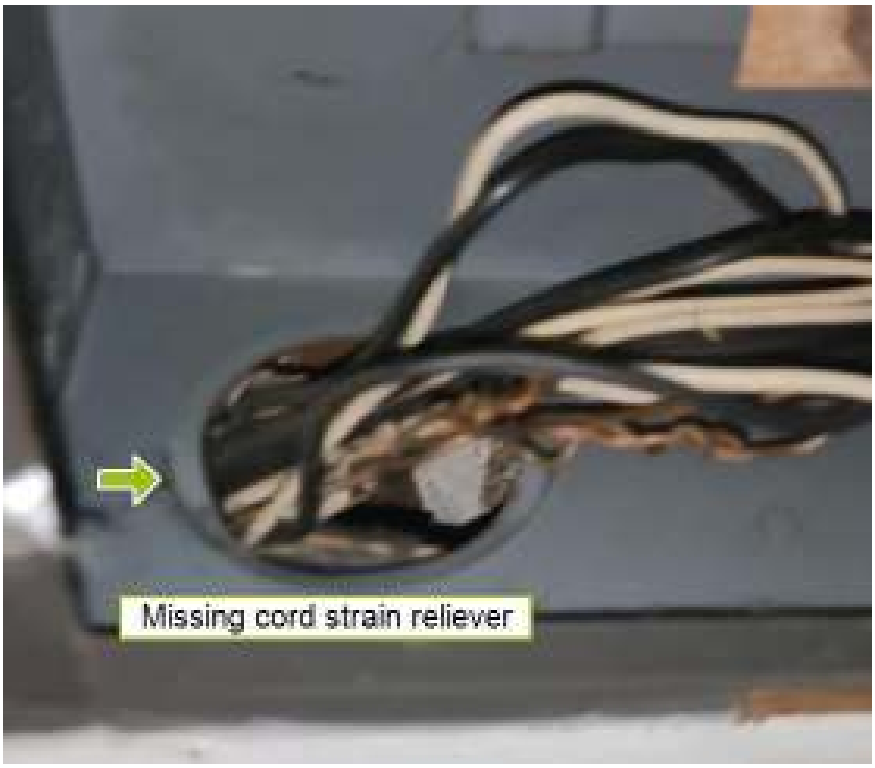
2 EVHUYHG D GDP DJHG OYH Z LUH LQ WKH HOHFWUFDOSDQHO WKLV LV D VDIHW KD] DUG 5 HFRP P HQG KDYLQJ DQ HOHFWUFLDQ UHSDLUWKLV Z LUH IRUVDIHW



2 EVHUYHG WKDWRQH RUP RUH NQRFN RXWFRYHUV LV P LVVLQJ LQ WKH HOHFWUFDO6 8 % SDQHOZ KLFK SUHVHQWV D VDIHW KD] DUG 5 HFRP P HQG UHSODFLQJ WKLV FRYHUZ LWK D QHZ RQH WKLV LV DQ LQH[SHQVLYH LWHP Z KLFK FDQ EH SXUFKDVHG DWWKH OHFDOKDUGZ DUH VWRUH



2 EVHUYHG WKDWRQH RUP RUH RI WKH FRUG VWDLQ UHOHYHUV LQ WKH HOHFWUFDOSDQHODUH P LVVLQJ) RU\ RXU UHIHUHQFH WKH SXUSRVH RI D FRUG VWDLQ UHOHYHULV WR SUHYHQWHOHFWUFDOZ LUHV IURP EHLQJ SXOOHG RXWWKH ERWWRP RI WKH SDQHORUEHFRP LQJ IUD\ HG DQG WR NHHS SHWW IURP HQWHULQJ WKH SDQHO5 HFRP P HQG KDYLQJ DQ HOHFWUFLDQ LQVWDOOFRUG VWDLQ UHOHYHUV Z KHUH QHHGHG IRUVDIHW



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2 EVHUYHG WKDWWKH HOHFWUFDOSDQHOFRYHULV EHLQJ KHOG LQ SODFH Z LWK Z RRG VFUHZ V WKLV FDQ SHQHWUDWH D Z LUH 5 HFRP P HQG KDYLQJ DQ HOHFWUFLDQ UHP RYH WKH Z RRG VFUHZ V DQG UHSODFH Z LWK FLUFXLWEUHDNHUFDELQHW VFUHZ V LQWWHDG



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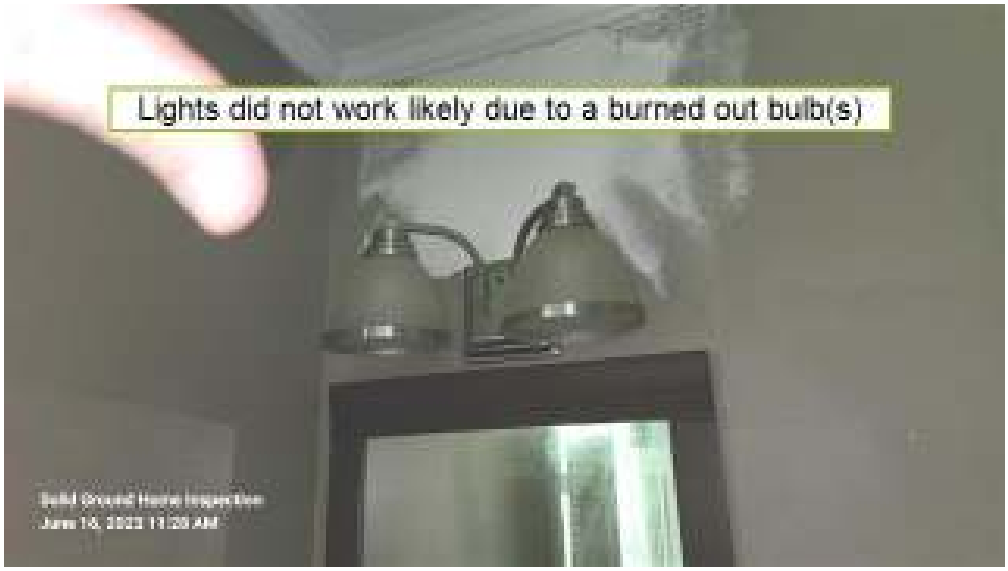
2 EVHUYHG WKDWWKHUH LV D VXE SDQHOLQ WKH J DUDJH





(/(&75,&$/),;785(6 &211(&7,216 &HLOLQJ)DQV /LJKWLQJ HWF
&RPPHQ,WQW SHFWHG

2 EVHUYHG WKDWRQH RUP RUH RI WKH QJKW GLG QRWZ RUN QNHO GXH WR HLWKHUD EXUQHG RXWRUP LVVLQJ EXOE
5 HFRP P HQG FKDQJLQJ WKH QJKWEXOEV WR VHH LL WKH QJKWZ RUN WKHQ ,I QRWUHFRP P HQG KDYLQJ DQ HOHFWUFLDQ
P DNH WKH UHSDLUV QHHGHG VR WKH QJKWZ RUN DV WKH\ VKRXOG



27+(5 (/(&75,&$&/211(&7,216 VSOLFHV MXQFWLRQ ER[HV
&RPPHQ,WQW SHFWHG

2 EVHUYHG WKDWWKHUH LV D KRP H P DGH HOHFWUFDORXWOHWQH[WWR WKH KDOWRLOHW5 HFRP P HQG KDYLQJ DQ
HOHFWUFLDQ LQWDOOD SURSHURXWOHWZ LWK *) &, SURWHFWRQ IRUVDIHW





2 EVHUYHG WKDWWKH GRRUEHOOGRHVQWZ RUN Z KHQ WMWWMG 5 HFRP P HQG KDYLQJ D KDQG\ P DQ P DNH WKH UHSDLUV QHHGHG VR WKH GRRUEHOOZ RUNV DV LWWKRXOG

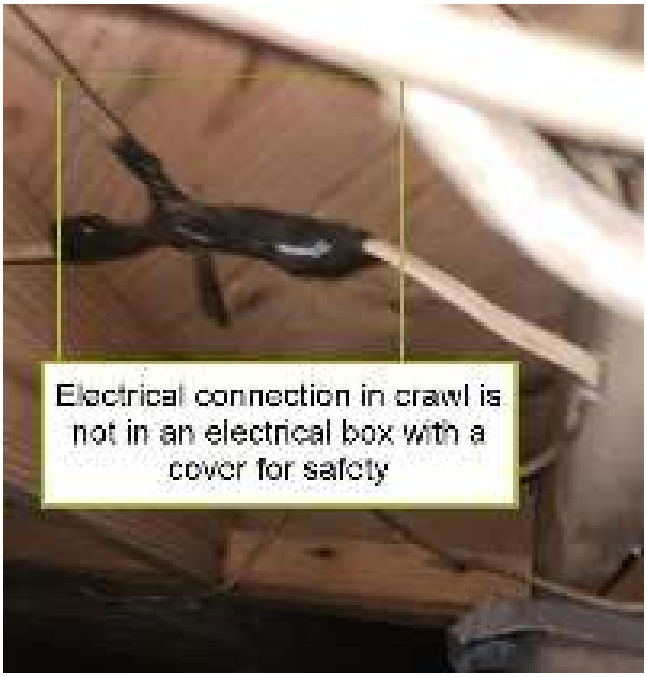


2 EVHUYHG WKDWWKHUH LV D Z LUH FRQQHFWRQ LQ WKH J DUDJ H Z KLFK GRHV QRWKDYH D FRYHU 5 HFRP P HQG KDYLQJ DQ HOHFWULFLDQ RUKDQG\ P DQ LQWDOOD FRYHU IRUWKLV ER[IRUVDIHW



2 EVHUYHG WKDWWKHUH DUH D FRXSOH RI Z LUH FRQQHFWRQV LQ WKH FUDZ OVSDFH DQG LQ WKH DWWF Z KLFK DUH QRW HQFORVHG LQ DQ HOHFWULFDOER[5 HFRP P HQG KDYLQJ DQ HOHFWULFLDQ HQFORVH WKHVH FRQQHFWRQV LQ DQ HOHFWULFDOMXQFWRQ ER[Z LWK D FRYHU IRUVDIHW







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KDYLQJDQHOHFWUFLDQPDNHWKHQHHGHGUHSDLUVVRWKHVHRXWOHWDUHSURSHUOJURXQGHGIRUVDIHW)RU\RXU

UHIHUHQFH D JURXQGHG RXWOHWKDV D VDIHW JURXQG WKH WKLUG SURQJ LQ DGGLWRQ WR WKH QRUP DOWZR FRQGXFWRUV
6 SHFLLLFDOO LWLV D V\ VWMP WR UHGLUHFWHOHFWLFLW RXWRI LW LQWMQGHG SDWK VXFK DV D YRODJH VXUJH RUQJ KWMQLQJ
WR WKH JURXQG DQG SUHYHQWD GDQJ HURXV VKRFN WR WKH KRP HRZ QHU ,Q D JURXQGHG RXWOHWWKH JURXQG Z LUH Z LOO
UHGLUHFWHOHFWLFLW WR WKH JURXQG LQWMDG RI WKURXJ K WKH KRP HRZ QHU Z KHQ QHHGHG












Solid Ground Home Inspection
June 16, 2023 11:05 AM









2 EVHUYHG WKDWRQH RUP RUH RI WKH H[WHULRUHOHFWUFDORXWOHW GR QRWKDYH RXWORRUFRYHUV 5 HFRP P HQG KDYLQJ DQ HOHFWUFLDQ RUKDQG\ P DQ LQWDOORXWORRUFRYHUV Z KHUH QHHGHG WR KHOS NHHS WKHVH RXWOHW Z DWHU WLJ KWI RUVDI HW



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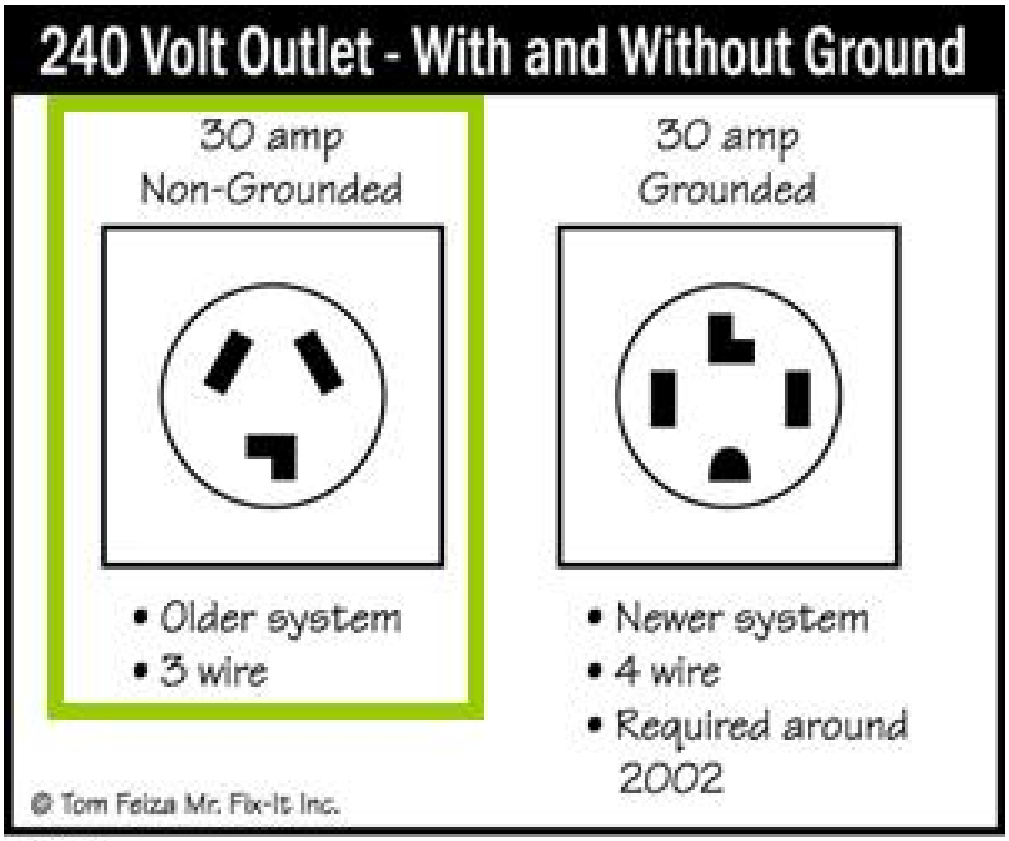
&RPPHQ,WQW SHFWHG

,I WKH SOXJ IRU\ RXUGLJ HUGRHVQ WLWLQWR WKH GLJ HURXWOHWWKHQ WDNH WKLV SKRWR WR \ RXUGRFDOKRP H RUKDUGZ DUH WRUH DQG DVN IRUD WKUHH SURQJ GLJ HU SLJ WDLO VR WKDWWKH GLJ HUFDQ EH SOXJJ HG LQ



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2 EVHUYHG WKDWWKHUH DUH*)&, *URXQG) DXOW&LUFXLW,QWHUUXSWHUV RXWOHW LQ WKH EDWKURRP V EXWQRZ KHUH HOVH LQ WKH KRXVH WKLV LV WSLFDOIRUD KRP H RI LW DJH VLQFH*)&, VZ HUHQ WUHTXLUHG WKURXJ K RXWZ KHQ WKLV KRP H Z DV EXLOW5 HFRP P HQG KDYLQJ DQ HOHFWUFLDQ LQWDOO*)&, RXWOHW LQVLGH WKH KRP H Z LWKLQ IWRI Z DWHU VXFK DV LQ WKH NLWKHQ DV Z HOODV LQ WKH J DUDJ H DQG RQ WKH H[WHUURU IRUVDIHW 7LS ,I \ RX WRUH D UHIUJ HUDWRU RUIUHH] HULQ WKH J DUDJ H EH VXUH QRWWR SOXJ LWLQWR WKH*)&, RXWOHWWR SUHYHQW RXUIRRG IURP VSRLOQJ LQ WKH HYHQWWKDWWKH*)&, WUSV DQG LV QRWUHVHWLQ D WLP HO P DQQHU



*RRG WR NQRZ *)&, V DUH HOHFWULFDO RXWOHWV ZKLFK KDYH D PRO
VKRXOG EH ORFDWHG LQVLGH DQG RXWVLGH ZHOOV KDVVRQ WHK ZLJJDKLLDQJH

+RZ WKH *)&, QVQ WKH KRPH V ZLULQJ V\VWHP WKH *)&, FRQVWDQWO\
FLUFXLW WR VHQVH DQ\ ORVV RI FXUUHQW ,I WKH FXUUHQW IORZLQ
WKDW UHWXUQLQJ WKH *)&, TXLFNO\ VZLWFKHV RII SRZHU WR WKDW
EOLQN RI DQ H\H WR SUHYHQW<EXOHDV\KDHFEEEYHH DRISHDQEFXOULVKLRWN EX
HOHFWURFXWHG RU UHFHLYH D VHULRXV VKRFN LQMXU\

+HUH V KRZ LW PD\ ZRUN6LXSSRVH EDREXVHH ZLUH LQVLGH DQ DSSOLDQF
7KH FDVH LV WKHQ FKDUJHGRZLWRXHFKHWFKHUDFSLSVO\LDQFH ZLWK RQH KD
WRXFKLQJ D JURXQGHG PHWDO REMHFW OLNH D ZDWHU IDXFHW \RX
DQ RXWOHW SURWHFWHG E\ D *)&, WKH SRZER ZLOO EH VKXW RII EH

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&RPPHQWRWV 3UHVHQW

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RI WKLV DJH)RU\RXUHHUHQFH WKLV LV D WSHRI HDFWDFORXWWZLWK D VDIHW\GHYLFHGHVLJQHGWRSUHYHQW
ILUH KD]DUGV ,QFRQWDW*)&, RXWWV DUHGHVLJQHGWRSUHYHQWHDFWF VKRFNKD]DUGV $OOKRPHV EXLOWLQFH
DUHUHTXLUHGWRKDYH$)&, RXWWV LQHYHU LQWRUORQJ VSDFH[FHSWZKHUHWKHLV D*)&, +RPHV
EXLOWEHZHHQ DQG ZHUHQ UHTXLUHGWRKDYHWKHP LQWKHEHGURRP V DQGKRPHV EXLOWSURUWR
ZHUHQWUHTXLUHGWRKDYHWKHP DWDOO$V D UHVXOWUFRP P HQGKDYLQJ DQHDFWDFLQWDOO$)&, RXWWV
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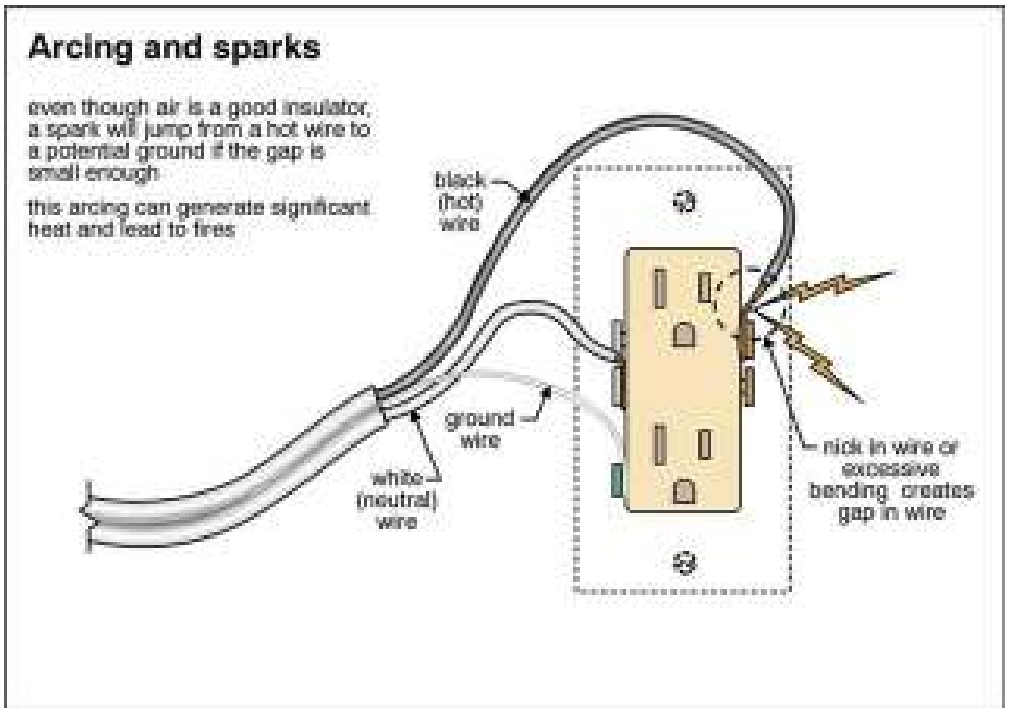

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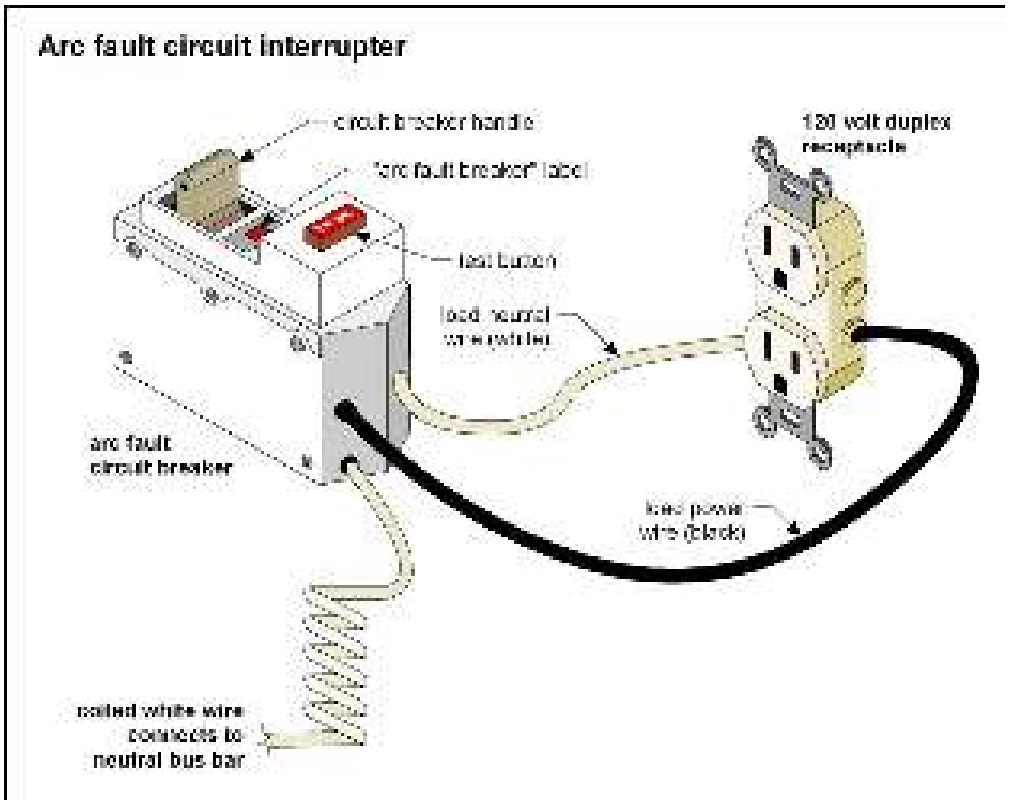

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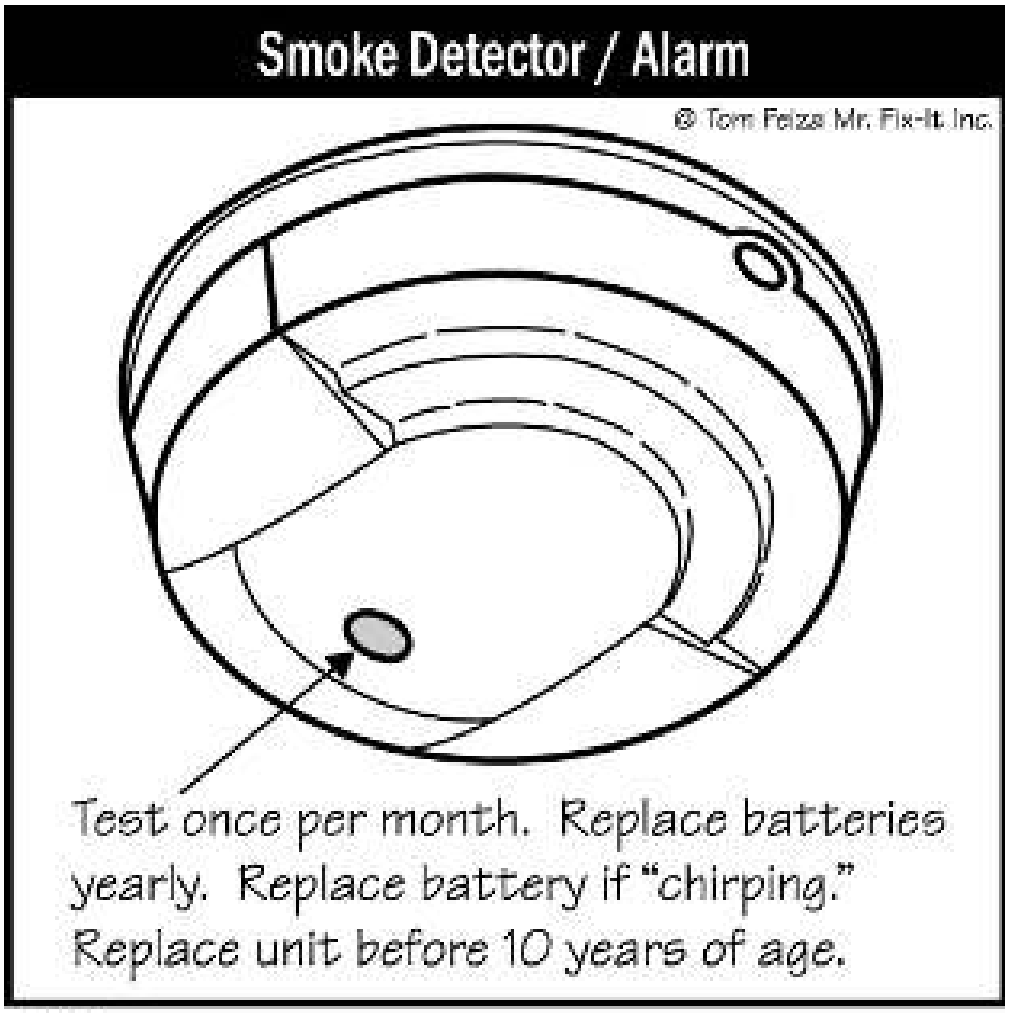

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- 7R SURYLGH WKH EHVWSURWHFWRQ IRU\ RXUKRP H UHFRP P HQG KDYLQJ ERWK WSHV RI VP RNH GHWHFWRUV LQWDOOHG LQ VHSDUDWH XQLW) LUWFKHFN VR VHH Z KDWWSH RI VP RNH GHWHFWRU\ RX KDYH WKH Z RUG SKRWRHOHFWLF RUWKH FDSLWDOOHWHU3 SULQWHG RUHP ERVVHG RQ WKHP ,I QRWWKHQ UHFRP P HQG LQWDOOQJ SKRWRHOHFWLF GHWHFWRUV LQ DGGLWRQ VR\ RXULRQ GHWHFWRUV
- ,I \ RX DOVR KDYH J DV DSSOLDQFHV VXJ J HVWSXUFKDVLQJ VHSDUDWH FDUERQ P RQR[LGH GHWHFWRUV QRW FRP ELQDWRQ XQLW EHFDXVH WKH\ QHHG VR EH UHSODFHG P RUH IUHTXHQWO
- 3 OHDVH QRWH WKHUH VKRXOG EH RQH VP RNH GHWHFWRULQ HDFK VOHHSLQJ DUHD EHGURRP DQRWKHUVP RNH GHWHFWRULQ WKH KDOZ D\ RXWLGH WKH VOHHSLQJ DUHD DQG DWOHDVWRQH VP RNH GHWHFWRURQ HDFK OHYHORI WKH KRP H
- 5 HFRP P HQG WHVWLQJ WKH GHWHFWRUV HYHU\ GD\ V E\ SXVKLQJ WKH WHVWEXWRQ
- : KHQ WKH EDWWHU\ QHHGV FKDQJLQJ WKH VP RNH DODUP Z LOOEHJ LQ VR FKLUS HYHU\ VHFRQGV RUVR WKLV Z LOOSHUVLVWRUD P RQWK 7 KLV LV P RVWOLNHO VR VWDUWLQ WKH P LGGOH RI WKH QJ KWZ KHQ WKH WHP SHUDWXUH LQ WKH KRXVH GURSV FDXVLQJ \ RX VR J HWXS DQG UHP RYH WKH EDWWHU\ VR \ RX FDQ VOHHS 7R SUHYHQWWKLV QXLVDQFH \ RX VKRXOG SLFN D VSHFLDOGD\ DQG J LYH \ RXUDODUP V QHZ EDWWHULHV RQFH D \ HDU 6 RP H ILUH VDIHW RUJ DQ]DWRQV SURP RWH FKDQJH \ RXUFORFNV FKDQJH \ RXUEDWWHULHV Z KHQ WKH FKDQJH LV P DGH EDFN IURP GD\ QJ KWVDYLQJ V WP H HDFK IDOO
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3 ÖHDVH UHI HUVR DWDFKHG GRFXP HQWHQWDOHG $ 6 + , 6 WDQGDUGV RI 3 UDFWLFH IRUUHYLHZ RI VKH VFRSH DQG QDWXUH RI VKLV KRP H LQVSHFWRQ DV LWDSSOLHV VR HOHFWULFDO 6 SHFLLFDOO VKH LQVSHFWRULV UHTXLUHG VR LQVSHFW VHUYLFH GURS VHUYLFH HQWDQFH FRQGXFWRUV FDEOHV DQG UDFHZ D\ V VHUYLFH HTXLSP HQWDQG P DLQ GLVFRQQHFW VHUYLFH J URXQGLQJ LQWUURUFRP SRQHQW RI VHUYLFH SDQHOV DQG VXESDQHOV FRQGXFWRUV RYHUFXUUHQWSURWHFWRQ GHYLFHV D UHSUHVHQWDWYH QXP EHURI LQWDOOHG QJ KWQJ IL[VXUHV VZ LWKHV DQG UHFHSWDFOHV J URXQG IDXOWFLUFXLWLQWUUXSWUV DQG DUF IDXOWFLUFXLWLQWUUXSWUV 3 OHDVH QRWH VKH LQVSHFWRULV 1 2 7 UHTXLUHG VR LQVSHFW UHP RWH FRQWRO GHYLFHV VWVWVP RNH FDUERQ P RQR[LGH DODUP V VHFXUW V\ VWMP V RURWKHUVLJ QDOQJ DQG Z DUQLQJ GHYLFHV OHZ YRODJ H Z LLLQJ V\ VWMP V DQG FRP SRQHQW DQFLODU Z LLLQJ V\ VWMP V DQG FRP SRQHQW QRWD SDUWRI VKH SULP DU\ HOHFWUFDOSRZ HU GLVWUEXWRQ V\ VWMP VRODU J HRWKHUP DO Z LQG DQG RWKHUUHQHZ DEOH HQHUJ \ V\ VWMP V $ OVR QRWWKH LQVSHFWRULV 1 2 7 UHTXLUHG VR P HDVXUH DP SHUDJ H YRODJ H DQG LP SHGDQFH RUGHWMUP LQH WKH DJ H DQG WSH RI VP RNH DODUP V FDUERQ P RQR[LGH DODUP V

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7 KH LQVSHFWRULV 1 2 7 UHTXLUHG VR SHUIRUP DFWRQV RUVR P DNH GHWMUP LQDWRQV RUVR P DNH UHFRP P HQGDWRQV QRWVSHFLLFDOO VWDWG LQ VKH 6 WDQGDUGV RI 3 UDFWFH ,QVSHFWRQV SHUIRUP HG XVLQJ VKLV 6 WDQGDUG DUH QRWWMFKQLFDOO H[KDXVWYH QRWUHTXLUHG VR LGHQW\ DQG UHSRUWFRQFHDOHG FRQGLWRQV OWMQWGHIHFW FRQVHTXHQWDOGDP DJ HV DQG FRVP HWF LP SHUIHFWRQV VKDWGR QRWVLJ QLLFDQWO DIIHFWKH FRP SRQHQW SHUIRUP DQFH RI LW LQWQGHG IXQFWRQ

7 KH HOHFWUFDOV\ VWMP RI VKH KRP H Z DV LQVSHFWG DQG UHSRUWG RQ Z LWK VKH DERYH LQIRUP DWRQ : KLOH VKH LQVSHFWRUP DNHV HYHU HIIRUWR ILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ J R XQQRWFHG 2 XWOHW Z HUH QRWUHP RYHG DQG VKH LQVSHFWRQ Z DV RQO YLVXDO$ Q\ RXWOHWQRWDFFHVVLEOH EHKLQG VKH UHIUJ HUDWRUIRUH[DP SOH Z DV QRWLQVSHFWG RUDFFHVVLEOH 3 OHDVH EH DZ DUH VKDWVKH LQVSHFWRUKDV \ RXUEHVWLQWUHVWLQ P LQG $ Q\ UHSDLULWMP V P HQWRQHG LQ VKLV UHSRUWVKRXOG EH FRQVLGHUHG EHIRUH SXUFKDVH ,WLV UHFRP P HQGHG VKDW TXDOLLHG FRQWDFWRUV EH XVHG LQ \ RXUIXUWKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWMV VR VKH FRP P HQW LQ VKLV LQVSHFWRQ UHSRUW

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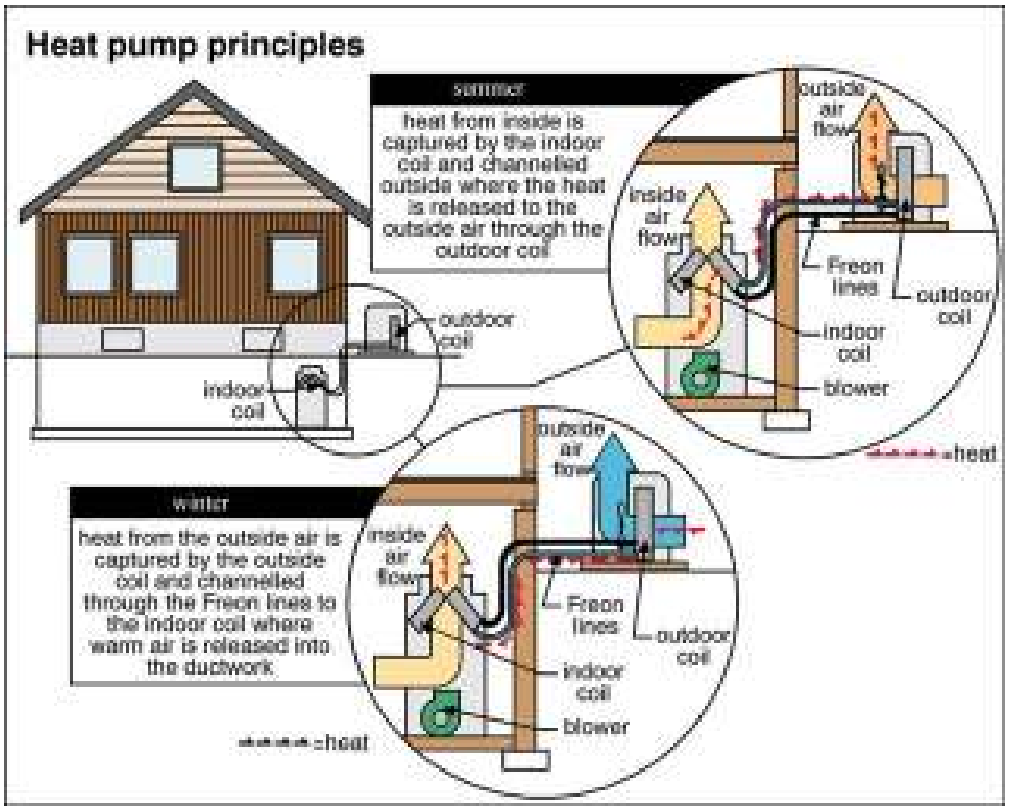
2 EVHUYHG WKDWWKLV KRP H KDV D KHDWSXP S V\ VWHP FRQVLWLQJ RI DQ RXWGRRUFRP SUHVVRU \ HDUV RQG DQG DQ LQGRRUDLUKDQGOHU \ HDUV RQG Z KLFK Z RUN WRJ HWKHUWR KHDWDQG FRRORWKH KRP H) RU\ RXUUHHUHQFH RXWGRRUD F FRP SUHVVRUV J HQHUDOO ODVWXS WR \ HDUV DQG DLUKDQGOHUV XS WR \ HDUV DQG ERWK RIWHQ ORQJ HU Z LWK J RRG P DLQWHQDQFH ' XH WR DJ H DQG FRQGLWLRQ UHFRP P HQG P RQLWRULQJ WKH + 9$ & HTXLSP HQWRUSRVVLEOH SURE OHP V DQG SODQ WR UHSODFH LWWKHP Z KHQ QHHGHG 3 OHDVH QRWH WKDWWKH GD\ OP LWHG Z DUUDQW SURYLGHG Z LWK \ RXUKRP H LQVSHFWLRQ Z LOQRWFRYHUHTXLSP HQWRYHU \ HDUV RQG $ V D UHVXOWZ H VWURQJ O UHFRP P HQG WKDW RX SXUFKDVH D \ HDUKRP H Z DUUDQW DWFORVLQJ NXVWLQ FDVH WKHUH DUH DQ LVVXHV Z LWK \ RXU+ 9$ & V\ VWHP Z LWKLQ WKH ILUVW HDURI OYLQJ LQ\ RXUQHZ KRP H

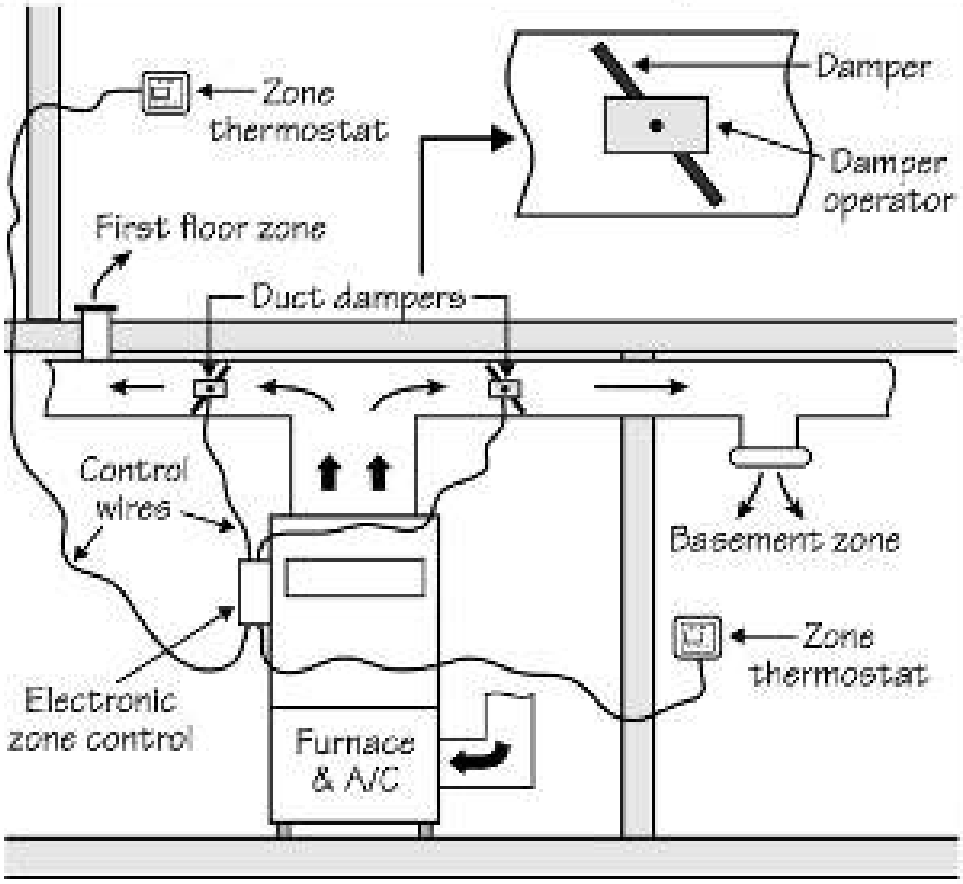


* RRG WR NQRZ + HDWSXP SV DUH XVHG IRUKHDWLQJ DQG FRROLQJ RI \ RXUKRP H E\ WUDQVI HUULQJ KHDWEHWZ HHQ WZ R UHVHUYRLUV ,Q WKH Z DUP HUP RQWKV WKH KHDWSXP S DFW ONH DQ DLUFRQGLWLRQHU P RYLQJ KHDWURP LQVLGH \ RXUKRP H WR WKH RXWLGH ' XULQJ Z LQWHUP RQWKV KHDWURP RXWGRRUV LV WUDQVI HUUHG WR WKH LQWHULRURI \ RXU KRP H $ P D] LQJ O HYHQ D) DKUHQKHLWGD\ WLOQSURGXFHV HQRXJ K KHDWWR Z DUP D KRP H YLD D KHDWSXP S



3 OHDVH QRWH WKLV KRP H KDV D VSOLW\ VWMP Z KLFK P HDQV WKDW WKHUH LV RQH V\ VWMP Z LWK WZ R KHDWLQJ DQG FRRODQJ] RQHV HDFK FRQWUROHG Z LWK D VHSDUDWH WKHUP RVWDWWRUHQHUJ\ VDYLQJV

Multi-Zone Forced Air System



With a multi-zone forced air system, zone thermostats signal the control to open and close duct dampers as needed for heated or cooled air flow.

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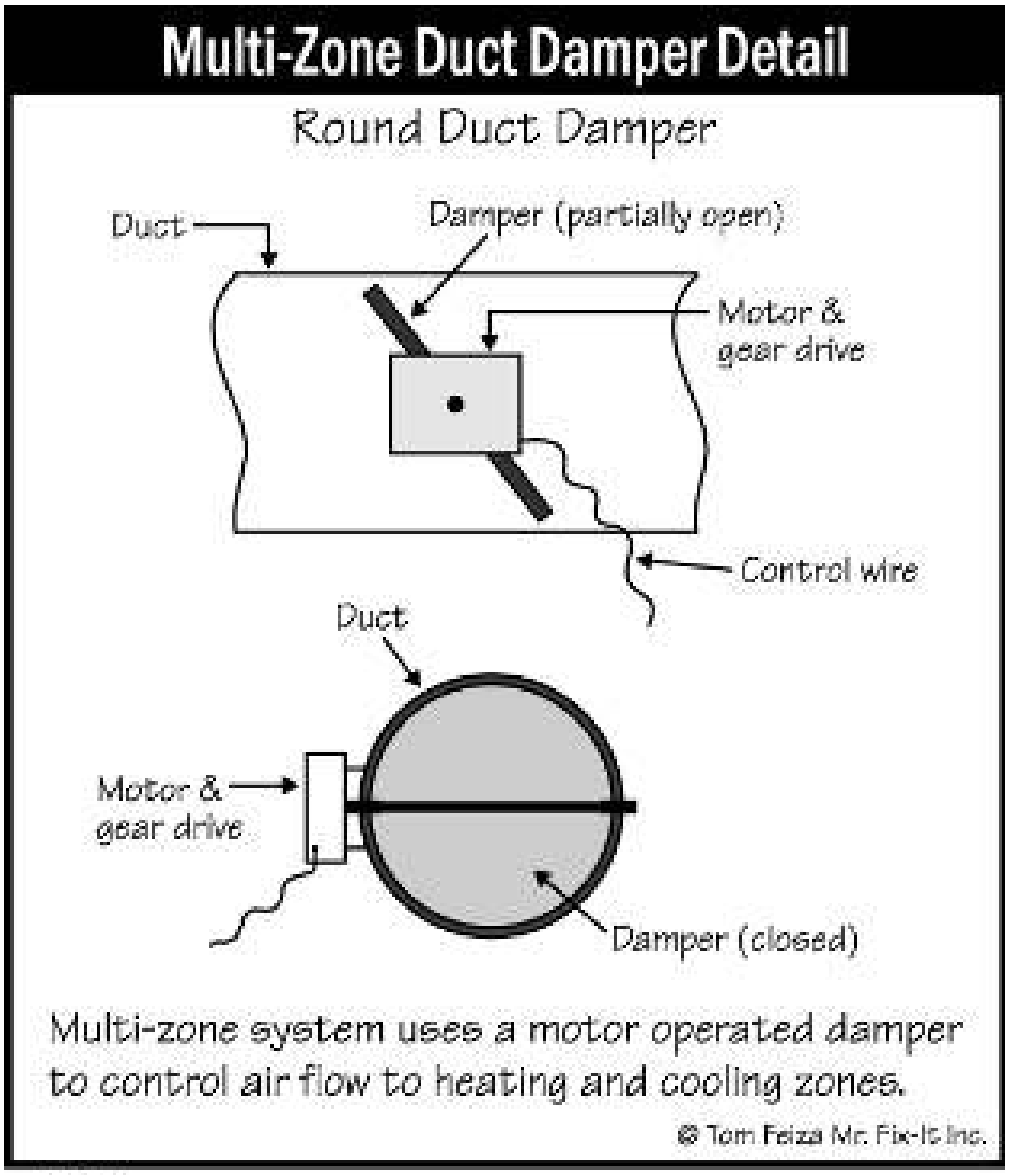

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* RRG WR NQRZ 7R KHOS P DNH WKH P RWWRI \ RXU+ 9$ & V\ VWMP EH VXUH WR XVH \ RXUFHLOQJ IDQV ,Q WKH VXP P HU P RQWKV D FHLOQJ IDQ FDQ FRRO\ RX RII XS WR VHYHQ GHJ UHHV E\ FUHDWQJ D ZLQG FKLOO HIIHFW$ V D UHVXOW\ RX FDQ LQFK WKH WKHUP RWDWXS D ELWRU HQHUJ\ VDYLQJ V $QG IRUWKRVH KRWKXP LG GD\ V RI VXP P HU WKHUH V QRWKLQJ P RUH Z RQGHUXOWKDQ D FRRO EUHH] H ,Q WKH Z LQWMUP RQWKV UXQ\ RXUIDQ LQ UHYHUVH RQ WKH GRZ HWWSHHG WR UHFLUFXODWH WKH KRWDLUWDSSHG QHDUWKH FHLOQJ 7KLV Z LOOHQDEOH \ RX WR VXUQ WKH WKHUP RWDWGRZ Q IXWWD WDG IRU P RUH HQHUJ\ VDYLQJ V $QG WKH EHWWSDUWLV WKDW RXUFHLOQJ IDQ XVHV RQO DV P XFK DV HQHUJ\ DV D Z DWW QJ KWEXOE $QG IXWWDV \ RX Z RXOG D QJ KWUHP HP EHUWR WXUQ RII WKH FHLOQJ IDQ Z KHQ \ RX OHDYH WKH URRP VR \ RX GRQ WQHJ DWH WKH HQHUJ\ GRODUV \ RX YH VDYHG



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&RPPHQ,WQW SHFWHG

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& R P P H Q ,WQW S H F W H G

3 OHDVH QRWH WKH DLUKDQGOHUKDV D IORDWZ LWFK ZKLFK ZLOOWUQ RII WKH RXWGRRUFRP SUHVVRUZ KHQ WKH FRQGHQVDWRQ SDQ IRUWKH DLUKDQGOHU ILOO XS WR SUHYHQWWKH ZDWHUIURP VSLOOQJ RYHURQWR WKH IORRUEHORZ

3 5 (6 (1 & (2) , 1$6/7 (' & 2 1 ' , 7 , 2 1 ($, 5 6 2 8 5 & (, 1 ($ & + 5 2 2 0
& R P P H Q ,WQW S H F W H G

$,5),7/(56 $,5 '8&76
&RPPHQ,WQW SHFWHG
2EVHUYHG WKDWWKH VL]H RI WKH DLUILOWHUV IRUWKH UHWXUQ UHJLWWHUV DUH [[DQG [

*RRG WR NQRZ 5HFRPPHQG XVLQJ DQ LQH[SHQVLYH DLU ILOWHU DQG
$Q HDV\ ZD\ WR UHPHPEHU WR FKDQJH WKH DLU ILOWHU LV WR FKDQ
\RXU UHIHUHQFH WKH SXUSRVH RI WKH DLU ILOW$HG LLWWRRJ JNHGH SL CRW
EORFNV DLU IORZ DQG UHGXFHV,IWGKLHUW\\VDWLHUPILVOHWHLUFVL HDQUKHQ WWVFWKHDPQJ
SURGXFH H[FHVV FRQGHQVDWLRQ ZKLFK \RX PD\ WKHQ VHH DV D PRL
KLJKHQ ILOWHUV PDNH LW PRUH GLIILFXOW IRU \RXU IXUQDFH DLU K
KRPH SXWWLQJ VWUDLQ RQ \RXU IXUQDFH DLU KDQGOHU DQG \RXU H





3 CHDVH UHIHUWR DWWDFKHG GRFXP HQWHQWWKDWG $6+,6 WDQGDUGV RI 3 UDFWLFH IRUUHYLHZ RI WKH VFRSH DQG QDWXUH RI WKLV KRP H
LQVSHFWLRQ DV LWDSSOLHV WR KHDWLQJ FHQWUDODLUFRQGLWLRQLQJ 6SHFLLFDOO WKH LQVSHFWRULV UHTXLUHG WR LQVSHFWRSHQ DQG UHDGLO
DFFHVVLEOH SDQHOV LQWDOOHG KHDWLQJ HTXLSP HQWYHQW\ VWMP V IOXHV DQG FKLP QH\ V KHDWLQJ FRRQLQJ GLWWLEXWRQ V\ VWMP V FHQWUDO
DQG SHUP DQHQWO LQWDOOHG FRRQLQJ HTXLSP HQW$ OR DV LWSHUWDLQV WR WKH ILUHSODFHV DQG IXHOEXUQLQJ DSSODQFHV WKH LQVSHFWRULV

UHTXLUHG VR LQVSHFWIXHOEXUQLQJ ILUHSODFH VWRYH ILUHSODFH LQVHUW IXHOEXUQLQJ DFFHVVRULHV LQVWDOOHG LQ ILUHSODFHV FKLP QH\ V DQG YHQWW\ VWMP V 3 OHDVH QRWW WKH LQVSHFWRULV 1 2 7 UHTXLUHG VR LQVSHFWLQWMULRUV RI YHQWW\ VWMP V IOXHV DQG FKLP QH\ V WKDWDUH QRW UHDGLO DFFHVVLEOH KHDWH[FKDQJHUV KXP LGLLLHUV GHKXP LGLLLHUV HOHFWUF DLUFOHDQLQJ DQG VDQLWLQJ GHYLFHV KHDWQJ V\ VWMP V RU FRROQJ V\ VWMP V XVLQJ JURXQG VRXUFH Z DWMUVRXUFH VRODUDQG UHQHZ DEOH HQHUJ\ WMFKQRORJLHV KHDWUHFRYHU\ DQG VLP LODUZ KROH KRXVH P HFKDQLFDOYHQWDWRQ V\ VWMP V FRROQJ XQLW WKDWDUH QRWSHUP DQHQWO LQWDOOHG RUWKDWDUH LQWDOOHG LQ Z LQGRZ V RU GHWMUP LQH FRROQJ VXSSO DGHTXDF\ DQG GLVWUEXWRQ EDODQFH $ OYR DV LWSHUWDLQV WR ILUHSODFH DQG IXHOEXUQLQJ DSSODQFHV WKH LQVSHFWRULV 1 2 7 UHTXLUHG LQVSHFWLQWMULRUV RI YHQWW\ VWMP V IOXHV DQG FKLP QH\ V WKDWDUH QRWUHDGLO DFFHVVLEOH ILUH VFUHHQV DQG GRRUV VHDOV DQG J DVNHW DXWRP DWF IXHOHHG GHYLFHV P DQWMOY DQG ILUHSODFH VXUURXQGV FRP EXVWRQ DLUFRP SRQHQW WR GHWMUP LQH WKHLUDGHTXDF\ KHDWGLVWUEXWRQ DVVLVW JUDYLW IHG DQG IDQ DVVLVWMG IXHOEXUQLQJ ILUHSODFH DQG DSSODQFHV ORFDWMG RXWLGH WKH LQVSHFWMG VWXFWXUH GHWMUP LQH WKH GUDIWFKDUDFWMULWWFV RUP RYH ILUHSODFH LQVHUW DQG VWRYHV RUILUHER[FRQWMQW

* HQHUDO/ LP LWDWRQV DQG ([FOXVLRQV
7KH LQVSHFWRULV 1 2 7 UHTXLUHG VR SHUIRUP DFWRQV RUWR P DNH GHWMUP LQDWRQV RUWR P DNH UHFRP P HQGDWRQV QRWWSHFLLLFDOO VWDWMG LQ WKH 6 WDQGDUGV RI 3 UDFWFH ,QVSHFWRQV SHUIRUP HG XVLQJ WKLV 6 WDQGDUG DUH QRWWMFKQLFDOO H[KDXVWYH QRWUHTXLUHG VR LGHQWW\ DQG UHSRUWFRQFHDOHG FRQGLWRQV ODWMQWGHIHFW FRQVHTXHQWDOGDP DJHV DQG FRVP HWF LP SHUIHFWRQV WKDWGR QRWWJQLLLFDQWO DIIHFWWKH FRP SRQHQW SHUIRUP DQFH RI LW LQWMQGHG IXQFWRQ

7KH KHDWQJ DQG FRROQJ V\ VWMP RI WKLV KRP H Z DV LQVSHFWMG DQG UHSRUWMG RQ Z LWK WKH DERYH LQIRUP DWRQ : KLOH WKH LQVSHFWRU P DNHV HYHU\ HIIRUWR ILQG DOODUHDV RI FRQFHUQ VRP H DUHDV FDQ J R XQQRWFHG 7KH LQVSHFWRQ LV QRWP HDQWWR EH WMFKQLFDOO H[KDXVWYH 7KH LQVSHFWRQ GRHV QRWLQYROYH UHP RYDODQG LQVSHFWRQ EHKLQG VHUYLFH GRRURUGLVP DQWDQJ WKDWZ RXOG RWKHUZ LVH UHYHDOVRP HWKLQJ RQO D OFHQVHG KHDWFRQWDFWRUZ RXOG GLVFRYHU 3 OHDVH EH DZ DUH WKDWWKH LQVSHFWRUKDV \ RXUEHVWLQWMUHVWLQ P LQG $ Q\ UHSDLULWMP V P HQWRQHG LQ WKLV UHSRUWWKRXOG EH FRQVLGHUHG EHIRUH SXUFKDVH ,WLV UHFRP P HQGHG WKDWTXDOLLHG FRQWDFWRUV EH XVHG LQ \ RXUIXUWKHULQVSHFWRQ RUUHSDLULVVXHV DV LWUHODWMV WR WKH FRP P HQW LQ WKLV LQVSHFWRQ UHSRUW

‹) LU SIOOFHV &KLP QH\ V

6WOHV 0 DWHULDOV

7\ SH RI) LUHSOOFH V
: RRG EXUQLQJ EULFN ILUHSOOFH

1 XP EHURI ILUHSOOFHV

&KLP QH\ ) OXH
%ULFN

,WHP V

) , 5 (3 / $ & (
& R P P H Q ,WQW S H F W H G

2 EVHUYHG WKDWWKLV KRP H KDV D EULFN Z RRG EXUQLQJ ILUHSOOFH





& + , 0 1 (< 6) / 8 (3 , 3 (6 9 (1 7 6 I L U H S O D F H V
& R P P H Q ,WQW S H F W H G

2 EVHUYHG WKDWWKH FKLP QH\ RUFKLP QH\ OQHUDSSHDUV WR EH LQJ RRG FRQGLWRQ 3 OHDVH QRWH WKHUH LV VRP H EXW QRWD OWWRI FUHRVRWH EXLOG XS Z KLFK FDQ EH D ILUH KD] DUG DQG P D\ DOVR FRQFHDOKDLLOQH FUDFNV $ V D VDI HW SUHFDXWRQ Z H J HQHUDOO VXJJ HVWKDYLQJ D FKLP QH\ VZ HHS FOHDQ WKH OQHUWR UHP RYH WKH EXLOG XS %XLOG XS Z KLFK LV GHHS RUP RUH VKRXOG EH FOHDQHG : LWK WKH EXLOG XS UHP RYHG WKHQ KDYH WKH FKLP QH\ VZ HHS RU ILUHSOOFH FRQWDFWRULQVSHFWWKH FKLP QH\ RUOQHUI XUWKHUWR HQVXUH LWLV LQJ RRG FRQGLWRQ EHI RUH D ILUH LV P DGH LQ WKH ILUHSOOFH







‹* DUDJH











6WOHV 0 DWHULDOV

* DUDJH' RRU7\ SH	* DUDJH' RRU0 DWHULDO	$ XWR 2 SHQHU%UDQG
7Z R DXWRP DWF	0 HWDO	&+$0 %(5/$,1

,WHP V

5(&(,/,1*6 LQFOXGLQJ ILUHZDOO VHSDUDWLRQ &RPPHQ,WQW SHFWHG

2 EVHUYHG WKDWWKHUH LV DQ RSHQLQJ LQ WKH JDUDJH FHLOQJ WKLV EUHDNV WKH ILUHWRS) RU\ RXUUHIHUHQFH GLVZ DOODOR VHUYHV DV D ILUHWRS Z KLFK P HDQV WKDWWGHO\ V WKH SHQHWDWRQ RI D ILUH XS LQWR WKH KRP H DWF IRUD VKRUWDP RXQWRI WP H 5 HFRP P HQG KDYLQJ D FRQWDFWRULQWDOOGLVZ DOOWR HQFORVH WKH JDUDJH FHLOQJ IRU VDIHW



5(:$//6 LQFOXGLQJ ILUHZDOO VHSDUDWLRQ
&RPPHQW,QW\SHFWHG

2EVHUYHGWKDWWKHZDOOLQVLGHWKHJDUDJHZKLFKLVDGMDFHQWWRWKHKRPHLVFRYHUHGLQSDQHOLQJ $VDUHVXOW, FRXOGQRWGHWHUPLQHLIWKHUHLVGLUHFWDOOEHKLZWKHSDQHOLQJ)RU\RXUUHIHUHQFH GLUHFWDOOYRVHUYHVDVDILUH VWRSWKHSUHGXFHWKHVSHHGDWZKLFKILUHVSUHDGV 5HFRPPHQGKDYLQJDFRQWUDFWRUKDQGPDQH GHWHUPLQHLIGLUHFWDOLSUHVHQWRUQRW,IQRWWKHQUHFRPPHQGKDYLQJWKHFRQWUDFWRULQVWDOOGLUHFWDOODQJWKLV ZDOOIRUVDIHW\



5( )/225
&RPPHQW,QW\SHFWHG

(;7(5,25 ’225)520 *5*(7,6,’(+20(,V WKLV GRRU ILUH UD
&RPPHQW,QW\SHFWHG

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$872 0$7,& *5*(’225 23(1(5 6
&RPPHQW,QW\SHFWHG

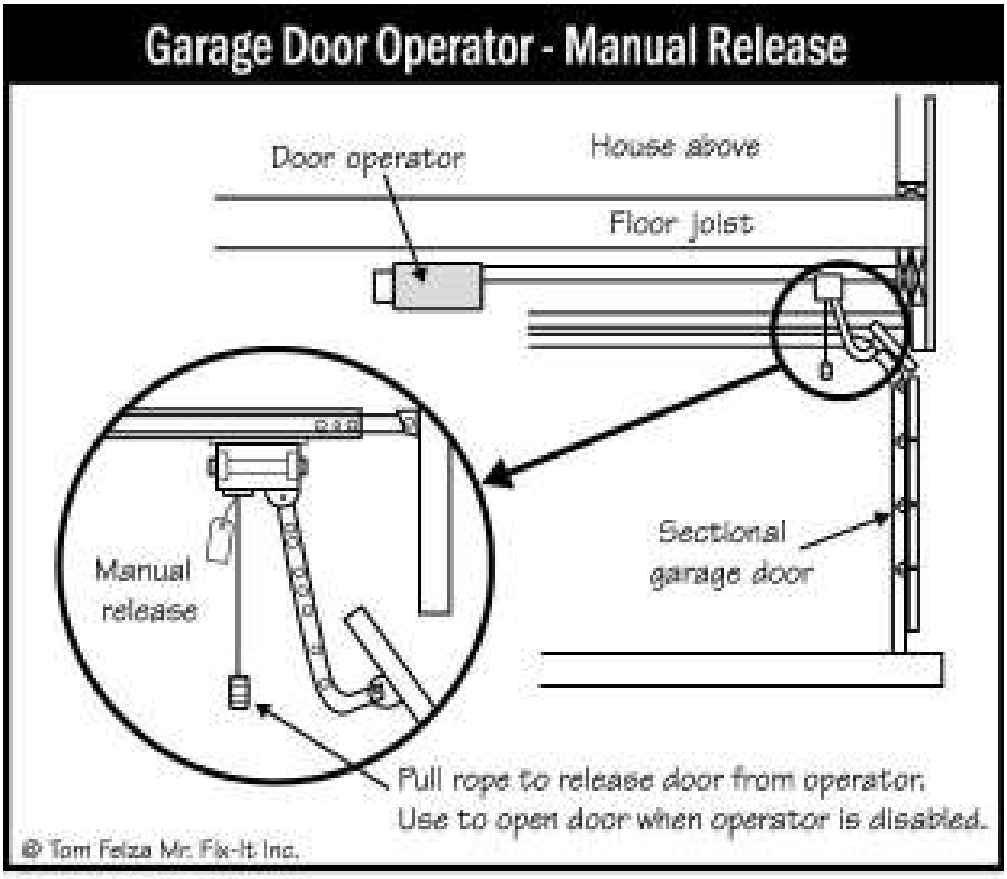
2EVHUYHGWKDWWKLVKRPHKDVWZRDXWRPDWLFJDUDJHGRRUSHQHUVLQJRRGZRUNLQJRUGHU)RU\RXUHIHUHQFH WKHUHDUH WKUHHEDVLFVDIHWLHDXUHVRQ\RXUJDUDJHGRRUWKDWVKRXOGSHUIRUPDOOEHWWHUG LGHDO RQFHDP RQWK

7KHILUVWVDIHWIHDXUHWKDWVKRXOGEHFKHFNHGLVWKHVDIHW\UHYHUVHSKRWRHEHDP 7KLVQJKWEHDP VKRXOGEH LQVWDOOGDWDERXW LQFKHVIURP WKHIORRUDQGVKRXOGUHYHUVHWKHGLUHFWLRQ RI WKHGRRUZKHQWKHEHDP LVEURNHQ %H VXUHWRUHHUWHVWHLQWDOODWLRQLQWKFWRVIRUSURPXQQJ RI WKLVP SRUWDQWVDIHWIHDXUH

7 KH VHFRQG VDI HW I HDXUH WKDW WK RXOG EH FKHFN HG LV WKH DXWR UHYHUVH 7 KLV I HDXUH Z LOOUHYHUVH WKH GLUHFWRQ RI WKH GRRU VKRXOG LW HQFRXQ WUUHVLWDQFH Z KLOH LQ P RWRQ ERWK XS DQG GRZ Q 7 KLV FDQ EH WHWWG E\ SODFLQJ DQ REMHFW LQ WKH SDWK RI WKH GRRU RUK RQGLQJ WKH GRRU Z KLOH LQ P RWRQ 7 KH KRQGLQJ P HWRG LV SUH HUUHG EHFDXVH DI DXOW DXWR UHYHUVH FDQ GR VHUURXV GDP DJH WR WKH GRRU XVXDOO WKH WRS SDQHOZ LOOEHQG RUFUDFN Z KHUH LWDWDFKHV WR WKH RSHQHU , I WKH RSHQHU I DLOV WKLV WHWW P LQRUDGXWWR HQW WR WKH VHQVLWLYLW VHWWQJ RQ WKH RSHQHU Z LOORI WHQ UHVRYH WKLV LVXH

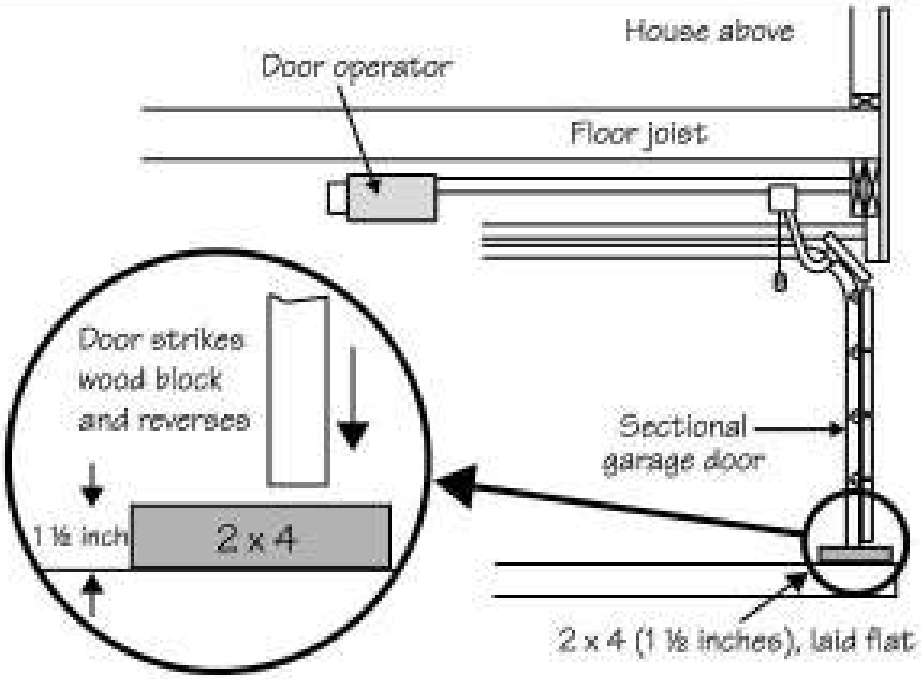
7 KH I LQDOVDI HW I HDXUH RQ \ RXUJ DUDJH GRRU LV WKH P DQXDOUHOHDVH FRUG I RU WKH GRRU RSHQHU , I WKH SRZ HUJ RHV RXW \ RX OOZ DQ WR VKXWDQG OPFN WKH J DUDJH





M015

Garage Door Pressure Test



Close door on 2 x 4 (1 ½ inches high). Door must reverse when it strikes the wood; if not, have is repaired or replaces immediately.

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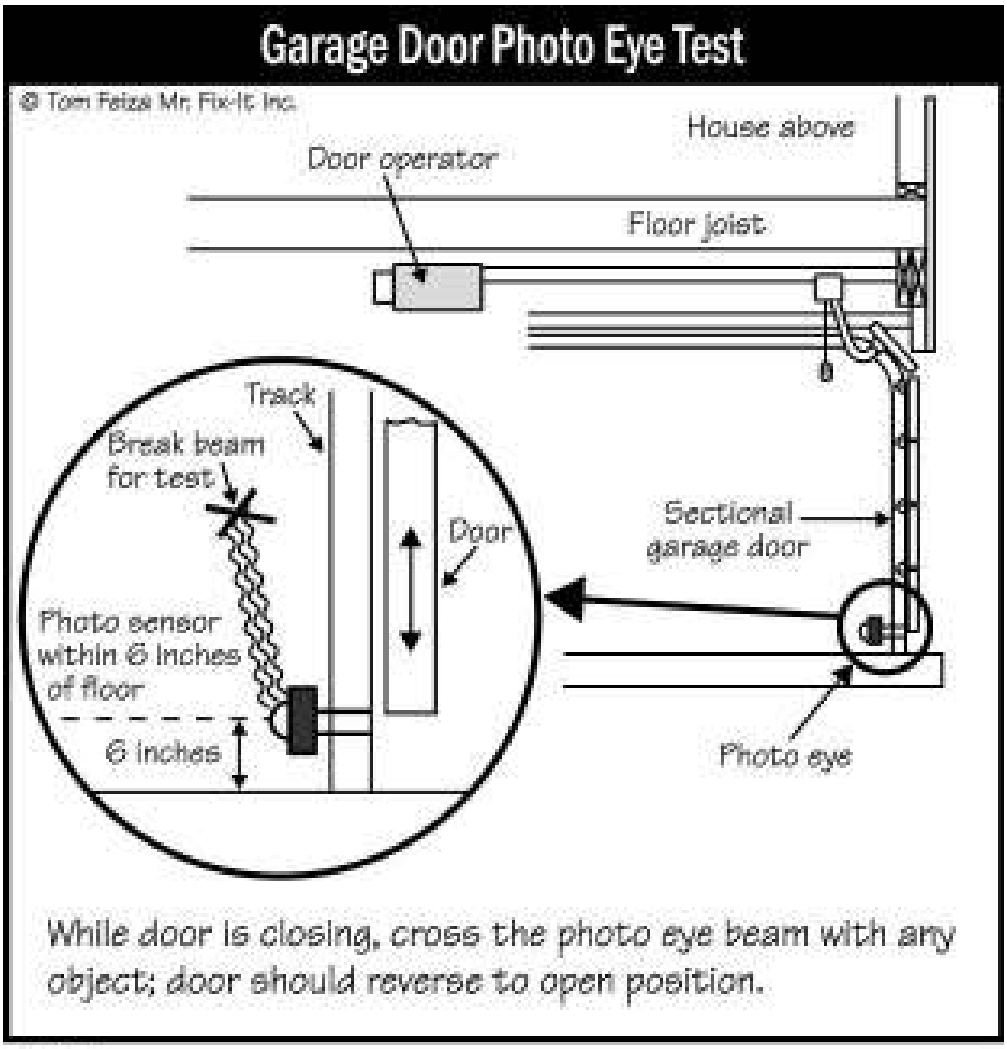
MO16



M017

* $ 5 $ * (5 2 2)
& R P P H Q ,VQ W S H F W H G

3 OHDVH UHI HUWR DWDFKHG GRFXP HQWHQWLWOHG $ 6 + , 6 WDQGDUGV RI 3 UDFWLFH IRUUHYLHZ RI WKH VFRSH DQG QDWXUH RI WKLV KRP H LQVSHFWLRQ DV LWDSSOLHV WR J DUDJ HV 6 SHFLLLFDOO WKH LQVSHFWRULV UHTXLUHG WR LQVSHFWJ DUDJ H GRRUV DQG J DUDJ H GRRURSHUDWRUV

* HQHUDO/ LP LWDWLRQV DQG ([FOXVLRQV
7KH LQVSHFWRULV 1 2 7 UHTXLUHG WR SHUIRUP DFWLRQV RUWR P DNH GHWHUP LQDWLRQV RUWR P DNH UHFRP P HQGDWLRQV QRWWSHFLLLFDOO VWDWHG LQ WKH 6 WDQGDUGV RI 3 UDFWLFH ,QVSHFWLRQV SHUIRUP HG XVLQJ WKLV 6 WDQGDUG DUH QRWWMFKQLFDOO H[KDXVWLYH QRWUHTXLUHG WR LGHQWW DQG UHSRUWFRQFHDOHG FRQGLWLRQV OWMQWGHI HFW FRQVHTXHQWDOGDP DJ HV DQG FRVP HWF LP SHUIHFWLRQV WKDWGR QRWWLJ QLLLFDQWO DII HFWWKH FRP SRQHQW/ SHUIRUP DQFH RI LW LQWMQGHG IXQFWLRQ

<: DWHU HOOV

6WOHV 0 DWHULDOV

3 XP S 7\ SH
$ ERYH J URXQG
$ FFHVVRULHV
$ LUEODGGHUWDQN

,WHP V

:(// 3803$1' (48,30(17
& R P P H Q ,WQW S H F W H G

2 EVHUYHG WKDWWKHUH LV D Z DWHUZ HOO RUZ DWHULQJ WKH \ DUG WKLV KHOSV UHGXFH \ RXUZ DWHUELOO) RU\ RXU UHI HUHQFH P RWWZ HOO LQ WKLV SDUWRI WRZ Q DUH VKDOORZ DQG DUH DUH XVHG IRULUUJ DWRQ 3 OHDVH QRWH WKLV D YLVXDOLQVSHFWRQ RQO Z H DUH QRWTXDOLLHG WR FRQGXFWDQ LQ GHSWK LQVSHFWRQ RI WKH Z DWHUZ HOO$ V D UHVXOW UHFRP P HQG KDYLQJ D Z DWHUZ HOOFRP SDQ LQVSHFWLQ IXUWKHUGHWDLO DV GHVLUHG WR HQVXUH DOOLV LQ J RRG FRQGLWRQ DQG Z RUNLQJ DV LWVKRXOG EH







) , /7 (5 6$ 1 ’ & 2 1 ’ , 7 , 2 1 (5 6
& R P P H Q 1 W R W 3 U H V H Q W

,QYR

’DWH RI ,QVS

6RLG *URXQG +RPH ,QVSHFWLRQV //&
6WDQGLVK 6W
&KDUOHVWRQ 6&
RLIH
ZZZVRLGJURXQGLQVSHFWLRQV FRP

3URSHUW\ ,Q
0DSOH /HD
0W 3OHDVDQW

,QVSHFWH
6WHSKHQ +
6RXWK &DUROLQD
VKRXPDUG#FRP

5HSRUW
0DSOH /HD

&OLHQW ,QI
%ULGJHW\

5HDO (VWDWH
6DOO\ 6
+RPH 6ZHHW +R

6HUYLFH

3ULFH $PRXQW6XE7RW

V WKUX V WR VT IW
&UDZOVSDFH

7RWDO 3UL

3D\PHQW 0H
,QYRLF

3D\PHQW 6
3DL

(QYLU RQ P EDQ YDDIHW &RQFHUQV

<RXUKRP HLQVSHFWRQ GRHV QRWLQFOXGH LGHQWLFDWLRQ RUWWVWQJ IRUWKH SUHVHQFH RI DYDULHW RI SRVVLEOH HQYLURQP HQWDO KD]DUGV VXFK DV DSEHVWRV P RGUP RGCONH VXEVWDQFHV JHQHUDOLTXDOW UDGRQJDV GHDG SDLQWXUHD IRUP DQGHK\ GH FRQWP LQDQW LQ VRLO ZDWUURUDLU XQGHUJURXQG RLOVWRUDJH WDQNV RUSURSDQH JDV WDQNV SHVWFLGHV WR[LF RUIDP P DEDH FKHP LFDOV WR[LQV FDUFLQRJHQV ZDWUURUDLUERUQ UHDWHG LDDHVV RUGLVHDVHDQG DOORWKHUVLP LDURUSRWHQWDO KD]DUGRXV VXEVWDQFHV DQG FRQGLWRQV \$GGLWRQDO WKH KRP HLQVSHFWRQ GRHV QRWLQFOXGH LGHQWLFDWLRQ RUWWVWQJ IRUZ RRG GHVWR\LQJ RUJDQLVP VRUSRWHQWDO KD]DUGRXV SDQW RUDQP DOV RQ WKH SURSHUW

: HHQFRXUDJH WKH KRP H EX\HUWR FRQWFWD FRP SHWHQWSHFLDOLVWLQ RUP DWRQ LGHQWLFDWRQ RUWWVWQJ RI WKH DERYH LV GHWHUHG %HORZ ZH YH LQFOXGHG VRP HLQ RUP DWRQ UHJDUGLQJ SRWHQWDO KD]DUGV DV LWP D\ UHDWWVWRKRP HV RI YDU\LQJ DJHV 7KLV LV QRWDQ H[KDXVWLYH OLVW EXWGRHV LQFOXGH VRP HRI WKH P RUH FRP P RQ HQYLURQP HQWDO KD]DUGV \$ V DUHVXOWZH VWRQJ\ UHFRP P HQG WKDW\RX UHYLHZ WKH EHORZ WR VHH Z KLFK P D\ DSSO\ WR \RX UHDWWVWRKRP H\RX UH SXUFKDVLQJ VR WKDW\RX FDQ SXUVXH LGHQWLFDWRQ DQG WWVWQJ DV GHVLUHG

)RU KRPHV RI DOO DJHV DEOO &HQGHZJRQ :

'U\ZDOO RU ZRRG ZKLFK KDV D PRLVWXUH FRQWHQW RI RWUKFRGHFDDFLXQLJWDZ ZRRG URW DQ\GV WGHHUVPLUWHGV PROG FDQ EH WHVWHG ZKHQ WKHUH WDKHHUVHDQVHWKLHY 3OHDVH QRWH ZKHQ WKHUH DUH PRLVWXUH VWDLQV RQ WKH GU\ZDOO LW LV S FHLOLQJ ZDOO ZKHU7HK LLWLVV MQRWVW YDLQ/ LLELOH6LQFH PROG DQG PLGHZ DUH FDXVH EH LGHQWLILHG DQG FRUUHFWHG :KHQ WKH PRLVWXUH LV JRQH WKH PROG ZL

)RU KRPHV ZLWK D FUDZO\$SFDFLHY HD,QQD FDWLHWRR)QXQLJL &RQD ZOSDFH

+RPHV ZKLFK KDYH D FUDZOVSDFH PD\ LQYDULDEO\ KDYH IXQJL RQ WKH ZRRG ZDV QRW PRQLWRUHG SHULRGLFDOO\ LQ WKH SDVW IXQJL PD\ EH SUHVHQW RQ GDPDJH WKH VWUXFWXUDO LQWHJULW\ RI WKH ZRRG 3OXV GDPS ZRRG FDQ DDV ORQJ DV WKH PRLVWXUH FRQWHQW RI WKH ZRRG UHPDLQV EHORZ WKH IXQJ FRQWHQW \RXU KRPH LQVSHFWRU ZLOO UHFRPPHQG D YDULHW\ RI DFWKRQV ZH UHFRPPHQG PRQLWRULQJ WKH PRLVWXUH FRQWHQW RI WKH ZRRG SHULRGLP HWHU WR HQVXUH PRLVWXUH F+RQWHQ\WDQ\WHWRZLDQQWWEWWHRFRQVLGHU KDYLQJ WKH UHPHGLDWRU LI WKHUH LV VLJQLILFDQW DPRXQW RQ WKH ZRRG RU E\ GR LW

)RU KRPHV RI DOO D\$HLV 4X*DHQLHWU\\$OOOHHOG GHQ\$LLUQ WKH

'U\ZDOO 3OHDVH QRWH WKDW \RXU KRPH LQVSHFWLRQ GRHV QRW LQFOXGH D W DQG RU DOOHUJH+HQZHLYQWWKHUHDLUH PDQ\ W\SHV RIHDUHQHWUSHHQRVQWHR VZKKRLZFKZLGLHO\ VHQVLWLWLYWLLQJ IRU DOOHUJHQV UHTXLUHV D VSHFLDOLVW LQVSHFWLRQ DQG LI ZKR FDQ GR DQ DLU TXDOLW\ WHVW

)RU KRPHV EXLOW EHIRUH WKH H\$DEHVWRVVLQ **3RSVFEQH&HLOLQJV**

'XH WR WKH DJH RI WKLV KRXVH LWV SRVVLEOH WKDW SRSFRUQ FHLOLQJV DQ ZDV EXLOW EHIRUH RU VRPHWLPH LQ WKH HDUO\ V OHIW RYHU LQYHQW UHPRYH WKH SRSFRUQ WR FUHDWH D VPRRWK FHLOLQJ UHFRPPHQG KDYLQJ \R GRQH LQ D VDI&HHPDQQHU FDQ EH WHVWHG YLD D SURIHVVLRQDO RU YLD D GR L WKHQ WKH FHLOLQJ LV FRQVLGHU VDIH DV ORQJ DV LW LV QRW GLVWXEHG V

)RU \RXU UHIHUHQFH LW V QRW XQFRPPRQ WR ILQG DVEHVWRV LQ DFRXVWLF H H[HPSW IURP WKH EDQ ,I \RX GR QRW SODQ WR UHPRYH WKH SRSFRUQ WK VXFK DV ZLWK UHSDLUV\WVWRRQVWDLQV RU PDQHWHF HQFDSVXODWHG ZLWK D QHZ OD\HU RI Q WKH H[LVWL7QJLVFHLOLQJ PRVW HFRQRPLFDO VROXWLRQ WR WKH DVEHVWRV ,I EHFDXVH UROOLQJ RU VPUD\LQJ FDQ UHOHDVH WHWWKHKDFDPXOKHGEHUVLQQKRKHGRWKH

HQFDSVXODWH DVEHVWRV ILEHU URU DPRUHULGLQRUWRWLRQ ZHEVLWH WLWLW WKH (3
KWWS HZZZJRY DVEHVWRV LQGH[KWPO

)RU KRPHV EXLOW EHIRUH WKH $PLGHVWRW DG3RVULEHG LQ 2OG)ORRULQJ

'XH WR WKH DJH RI WKLV KRPH SOHDVH QRWH LWV SRVVLEOH WKDW ROG YLQ\
KLGGHQ XQGHU PRUH FXUUHQW OD\HUV RI IORRULQJ VXFK DV LQ WKH NLWFKH
WKH JURXW DQG RU LQ\ WKHRUHWLFDOO\ PDQXIDFWXUHG DV UHSODFHPHQW
IORRULQJ PD\ FRQWDLQ OHDG LQ WKH YDUQLVK ,I WKH IORRU KDVQ W EHHQ V
FRQWDLQ OHDG ,Q PDQXIDFWXUHUV RI YDUQLVK VWRSSHG XVLQJ OHDG E
WKHVH SURGXFWV ,I \RX SODQ WR LQVWDOO QHZ IORRULQJ LW LV EHVW WR V
DUHQ W GLVWXUEHG ,I \RX ZDQW WR UHPRYH WKH FXUUHQW DQG RULJLQDO O
FRQWUDFWRU WR HQVXUH WKH UHQRYDWLRQ LQFRUSRUDWHV DQ DSSURSULDWH DV
ZHEVLWH DW KWWSV SRYZZZEHVWRV LQGH[KWPO 5HJDUGLQJ ZRRG IORRUV UHFR
SUHVHQFH RI OHDG SULRU WR UHILQLVKLQJ WKHP HVSHFLDOO\ LI \RX SODQ W
ORFDO /RZH V RU +RPH 'HSRW RU VLPSO\ DVN D IORRULQJ FRQWUDFWRU WR WI

)RU KRPHV EXLOW LQ RU ROGHU /HDG 3DLQW

'XH WR WKH DJH WKH KRPH SOHDVH QRWH LW LV OLNHO\ WKDW WKH ZKLWH V
PHQWLRQHG LQ WKH HYHQW WKDW \RX PD\ EH GRLQJ UHQRYDWLRQ ZRUN RU ZL
ZKR PD\ SXW WKHLU PRXWKV RQ ZLQGRZ VLOOV RU EDVHERDUGV LQ ZKLFK FDV
GHVLUHG WKH SDLQW FDQ EH WHVWHG HLWKHU E\ D SURIHVVLRQDO RU D GR L
SURSHUO\ UHPRYH RU HQFDSVXODWH WKH
UHVHDUFK DERXW OHDG SDLQW DQ LQWHUQHW VHDUFK ZLWK WKH NH\ ZRUGV
WKH WRSLF

)RU KRPHV EXLOW SULRU WR 3RVVLEOH /HDG LQ 2OGHU &RSSHU 3OXPELQ

,I \RX KDYH DQ ROGHU KRPH EXLOW SULRU WR DZDWK MFKSDWHU ZKLFK PD\ FRQWDLQ
KDYH EHHQ LQVWDOOHG ZLWK VROGHU RU ILWWLQJV ZKLFK PD\ FRQWDLQ7 HDG
RQO\ ZD\ WR NQRZ IRU VXUH LI WKHUH DUH XQVDIH OHYHOV RI OHDG RU PHWDOV
PRUH DERXW GULQNLQJ ZDWHU UHODWHG WKUHDWV WKHQ \RX PD\ ZDQW WR FRQVL
\RX KDYH FKLOGUHQ RU SHRSOH YXOQHUDEOH WR XVH RQO\ FROG ZDWHU RXW RI WKH WDS ,I

*RRG WR NQRZ &RSSHU SLSLQJ KDV EHHQ DURXQG IRU GHFDGHV GXH WR D
LQKLELWV EDFWHULD JURZWK ZKLFK UHVXOWV LQ VDIHU ZDWHU WR GULQN
HDUWKTXDNHV$OWKRXJK&RSSHU SLSHV ODVW IRU PDQ\ \HDUV DQG GR QRW GHJ
FRSSHU SLSHV IOH[VR WKDW WKH\ GR W VQDS

7KDW VDLG FRSSHU SLSHV FDQ VRPHWLPHV IDLO ZKHQ ZDWHU WHPSHUDWX
DQG EUHDN LQ YHU&RRGHQZHDWKHU FDQ IRUP LQ WKH SLSHV ZKLFK&DXVH
FRUURGH WKRXJK FRSSHU LV OHVV FRUURVLYH WKDQ RWKHU PHWDOV DQG
3LQ KROH OHDNV FDQ RFFXU DQ\WLPH FRSSHU SLSLQJ LV LPSURPHU\ JURX

)RU KRPHV ROGHU WKDQ 8QGHUJURXQG %XULHG 2LO 7

,I \RX KDYH D KRPH EXLOW LQWKHUH PD\VERHUHQHEOGHXQGHUJURXQG RLO VWRUD
WKH KRPH XQWLO KHDW ZDV FKDQJHG WR HOHFWULF RU JDV LQ WKH V 3O
WDQNV LQ 6RXWK &DURLQD)RU \RXUSHDFHG FRQVXOWDQW ZKR DQ HQYLURQ
(QYLUR6PDUWQYZZZRVPDUW XV UHJDUGLQJ ZKDW WR GR DERXW WKH W
HQYLURQPHQWDO FRPSDQ\ FDQ FRPH RXW DQG GHWHUPLQH LI WKH WDQN LV IL
LVQ W WKHQ WKH\ FDQ GHWHUPLQH LI WKHUH LV&RUVWLFRO PEDQDPHOGR SURFZDWHUC
UHPRYHG DQG ILOOHG ZLWK DQ LQHUW PDWHULDO VXFK DV 3RUWODQG &HPHQV

)RU KRPHV EXLOW SULRU WR 'HEHWDW%RRQW ZLWK 3UHVVXUH 7

<RXU KRPH PD\ KDYH DQ RXWGRRU ZRRG VWUXFWXUH VXFK DV D IURQW RU EDF
KRXVH LQ WKH \DUG DV ZHOO 6LQFH WKLV KRPH ZDV EXLOW SULRU WR LW
ZKLFK FRQWDLQV DQ DUVHQLF EDVHG SHVWLFLGH FDOOHG FKURPDWHG FRSSHU
WRGD\V RXWGRRU ZRRG SURGXFWV DUH IUHH RI &&$ PDQ\ GHFNEVHDRUGHRXWGHRUV
VHUYLFH

)RU \RXU UHIHUHQFH VRPH RI WKH DUVHQLF FDQ OHDFK RXW RI WKH7ZKHQ WRGD\VXUH
UHVLGXH RI DUVHQLF FDQ HDVLO\ JHW RQDUWRQKLFQGWKDWQGHFDFKWKLQURP)XUWKHZHU
FRQWDPLQDWH VRLO +XPDQ H[SRVXUH WR DUVHQLF LV SRVVLEOH IURP WRXFK
SOD\VFDSHV &&$ WUHDWHG ZRRG KDV DOVR EHHQ\KHVHGRLO VLPSKWWRRHWWHUWUDWHG
HOHYDWHG OHYHOV RI DUVHQLF 6RPH DUVHQLF FDQ JHW LQWR YHJHWDEOHV
H[SRVXUH WR FRQWDPLQDWHG GHFNV DQG VRLO

$UVHQLF LV D NQRZQ KXPDQ FDUFLQRJHQ WKDW FDQ LQFUHDVH WKH ULVN IRU
WLPH &KLOGUHQ ZKR SOD\ RQ GHFNV RU SOD\ VWUXFWXUHV PDGH IURRQ&&$ KZL
IUHTXHQWO\ SXW WKHLU ILQJHUV LQ WKHLU PRXWK DQG VR DUH PRVW *RLNGHOWF
NQRZ KRZHYHU LV WKDW WKH W\SH RI H[SRVXUH SRVVLEOH IURP URXWLQH XVH
GHDWK RU DFXWHHRZHPSWRRPWR WKH FDQFHU ULVN LW LVVSHU[XGRNXWHWRRPDQLVHQ

:KLOH LW LV EHVW WWRUKXDFWXQRQ &&$\RXU \DUG LW LV QRW QHFHVVDU\ WR UHI
ZLWK D IHZ SUHFDXWLRQDU\ PHDVXUHV \RRFGQKHOSUHQUGHVWDWDWRRW&&$
6HDO H[LVWLQJ VWUXFWXUHV UHYHLW\WRQWZHDWKHUSURRIVHDODQG VWDLQ RU SDLQW
ZRRG VXUIDFH WKDQ FDQ NHHS DUVHQLF IURP OHDFKLQJ RXW
.HHS FKLOGUHQ DQG SHWV DZD\ IURP DUHDV ZKHUH DUVHQLF PD\ KDYH OHDFKHG LQ
’R QRW VDQGSODVW&&$ RU SRZHU ZDVK E\ KLJKO\ZDWHUGDPDJH DQG RQ\RR
RXWGRRUV ZHDU SURWHFWLYH FORWKLQJ DQG FDUHIXOO\ FOHDQ XS VDZ
1HYHU EXUQ SUHVVXUH WUHDWHG ZRRG
,I \RX XVHG &&$ EDVHG ZRRG IRU FRPSRVW ELQV RU JDUGHQ WHUUDFLQJ
6HDODQWV DUH OHVV OLNHO\ WR ZRUN RQ WKHVH DSSOLFDWLRQV

)RU DOO KRPHV &DUERQ 0RQR[LGH

3OHDVH QRWH WKDW ZH GR QRW WHVW FDUERQ PRQR[LGHWKHGHRXFWRRHX DV SXU
GHWHFWRUHFRPPHQG FKDQJLQJ WKH EDWWHULHV ZKHQ \RX PRYH LQ DQG RU S
XQLW\RX KDYH DQ DWWDFKHG JDUDJH D ILUHSODFH DQG RU LI \RX KDYH DQ\
LQVWDOODWLRQ RI DW OHDVW WZR FDUERQ PRQR[LGH GHWHFWRUV ZLWK ORXG
DQG RQH LQ WKH VOHHSLQJ DUHDV IHHW IURP WKH IORRU IRU VDIHW\

)RU DOO KRPHV 6PRNH ’HWHFWRUV

,W LV OLNHO\QRWKHDWWZHHYGHUG VPRNH GHSWOHFWRUHLGLGWKHRWRFXVHF WR VHH LI WKH
HYHU\ZKHUH LQ WKH KRXVH WKH\ VKRXOG EH QRU GLG ZH FKHFN WR HQVXUH W
UHFRPPHQGDWLRQHW XOW UHFRPPHQG LQVWDOOLQJ QHZ EDWWHULHV LQ DOO W
HQVXUH WKH\ ZRUN DV WKHEOXKRXEHGVXIRU WHIQWWDOO DGGLWLRQDO VPRNH G
HYHU\ZKHUH LQ WKH KRXVHWHRWKHQVWRXORGZEHRZ ROG \RXU VPRNH GHWHFWRUV
\HDUV ROG RU PRUH VXJJHVW UHSODFLQJ DOO RI WKH GHWHFWRUV DV VRQ D

*RRG WR NQRZ 3OHDVH QRWH WKHUH DUH WZR W\SHV RI VPRNH GHWHFWRU
IODPH ILUHV VXFK DV D FRRNLQJ ILUH DQG SKRWRHOHFWULF ZKLFK UHDFW

- 7R SURYLGH WKH EHVW SURWHFWLRQ IRU \RXU KRPH UHFRPPHQG KDYL
XQLWV)LUVW FKHFN WR VHH ZKDW W\SH RI VPRNH GHWHFWRU \RXKDV
HPERVVHG RQ WKHP ,I QRW WKHQ UHFRPPHQG LQVWDOOLQJ SKRWRHO
- ,I \RX DOVR KDYH JDV DSSOLDQFHV VXJJHVW SXUFKDVLQJ VHSDUDWH F
EHFDXVH WKH\ QHHG WR EH UHSODFHG PRUH IUHTXHQWO\

- 3OHDVH QRWH WKHUH VKRXOG EH RQH VPRNH GHWHFWRU LQ HDFK VOHI
  RXWVLGH WKH VOHHSLQJ DUHD DQG DW OHDVW RQH VPRNH GHWHFWRU
- 5HFRPPHQG WHVWLQJ WKH GHWHFWRUV HYHU\ GD\V E\ SXVKLQJ WKH
- :KHQ WKH EDWWHU\ QHHGV FKDQJLQJ WKH VPRNH DODUP ZLOO EHJLQ \
  PRQWK 7KLV LV PRVW OLNHO\ WR VWDUW LQ WKH PLGGOH RI WKH QLJK
  XS DQG UHPRYH WKH EDWWHU\ HYHQW DQ VOHHS 7QFH \RX VKRXOG SL
  DODUPV QHZ EDWWHU\ RUJDQL]DWLRQV SURPRWH FKD
  ZKHQ WKH FKDQJH LV PDGH EDFN IURP GD\OLJKW VDYLQJV WLPH HDFK I
- 6PRNH GHWHFWRUV VKRXOG EH UHSODFHG HYHU\ \HDUV