

ACSTR2024 - Moncton, NB
24 au 27 avril 2024

Membres du conseil d'administration (veuillez vous lever)



Qu'est-ce que l'ACSTR? Notre rôle, dans les mots de nos membres...





Notre MISSION...

La mission de CARST est de rassembler des individus et des organisations déterminés à aider les Canadiens à réduire leur exposition au radon et à prévenir le cancer du poumon dû au radon.

Nous fournissons un endroit où les Canadiens peuvent trouver de l'information, des ressources et des professionnels pour les aider à comprendre comment réduire leur risque de radon.

Nous fournissons à nos membres des ressources, des opportunités d'en apprendre davantage sur la recherche, les normes et les meilleures pratiques sur le radon, et un endroit pour se connecter avec d'autres parties prenantes à travers le pays.

Objectifs de l'ACSTR (passés et futurs)

La réalisation de nos objectifs passés nous a permis d'arriver là où nous sommes aujourd'hui

- Tisser des liens avec les principales parties prenantes (professionnels de l'immobilier, professionnels de la santé, constructeurs, municipalités)
- Augmenter le nombre de dépistages réalisés dans les écoles
- Améliorer les connaissances des constructeurs en la matière
- Augmenter le nombre de membres (doubler le membrariat n'étant pas issu du PNCR-C)
- Augmenter la sensibilisation au radon et les taux de remédiation
- Campagne annuelle de sensibilisation du public
- Veiller à ce que notre approche et les mots que nous utilisons soient axés sur un modèle basé sur la santé (aussi bas que raisonnablement possible)
- Protection des locataires, protection des travailleurs et des enfants, institutionnelle, commerciale/industrielle
- Grande campagne de sensibilisation du public réussie
- Augmenter le budget
- Augmenter les commandites

Nos objectifs actuels nous font avancer

- Rencontres avec des professionnels dans le cadre de nos assemblées publiques
- Poursuite de nos efforts de sensibilisation, en particulier auprès des professionnels de la santé
- Subventions pour l'atténuation - provincial, fédéral, crédits d'impôt, sensibilisation par l'APC
- Les emplois liés au radon devraient-ils devenir des professions protégées/métiers spécialisés? Quels changements en découleraient?
- Amélioration des normes, de la responsabilisation et de la cohérence pour les professionnels présentant une certification du PNCR-C.
- Améliorer la communication, la sensibilisation et les efforts en matière de nouvelles constructions
- Augmenter le membrariat
- Continuer à veiller à ce que notre approche et les mots que nous utilisons soient axés sur un modèle basé sur la santé (aussi bas que raisonnablement possible)
- Poursuivre le déploiement des nouveaux cours de certification pour les agents immobiliers et les contrôleurs de la gestion de l'énergie



ABOUT TECHNICAL RESOURCES PROFESSIONAL DEVELOPMENT CONFERENCES COMMUNITIES

Home > Technical Resources > Standards & Guidelines > Standards Interpretations >

INTERPRETATIONS FOR STANDARD 62.1-2022

SHARE THIS

NOTE: All documents linked from this page are in PDF-format.

- Interpretation 62.1-2022-1 – June 24, 2023 (Refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2022, Section 2.4, regarding the scope of the standard)
- Interpretation 62.1-2022-2 – June 24, 2023 (Refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2022, Section 6.2.1.1.7, regarding the definition of Design Zone Population (P_d))
- Interpretation 62.1-2022-3 – June 25, 2023 (Refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2022, regarding ventilation requirements for sleeping pods)
- Interpretation 62.1-2022-4 – January 21, 2024 (Refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2022, Sections 2.2, 3, 5.2, 5.16.1 and Tables 5-1 and 6-3, regarding radon)

<https://www.ashrae.org/technical-resources/standards-and-guidelines/standards-interpretations/interpretations-for-standard-62-1-2022>

Interprétation de la norme 62.1-2022 (IC 62.1-2022-4) de l'ASHRAE

INTERPRETATION IC 62.1-2022-4 OF ANSI/ASHRAE STANDARD 62.1-2022 VENTILATION AND ACCEPTABLE INDOOR AIR QUALITY

Approved: January 21, 2024

Request from: Pam Warkentin, Canadian Association of Radon Scientists and Technologists (CARST) / Canadian – National Radon Proficiency Program (C-NRPP), 4 Donald McClintock Bay, Winnipeg, MB R2G 3N3.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2022, Sections 2.2, 3, 5.2, 5.16.1 and Tables 5-1 and 6-3, regarding radon.

Background: Radon is a naturally occurring, radioactive gas which is odourless and tasteless. A CARST/C-NRPP member was informed by a building consultant that radon is classified as Class 4 air and that ASHRAE standards apply to radon mitigation system discharge points.

Although the radon levels at the discharge pipe (i.e. exhaust point) can be above applicable US-EPA, Health Canada, Canada Labour Code, or World Health Organization permissible exposure concentrations, the radon concentrations have been demonstrated to dissipate to outdoor ambient air concentrations within 6' (2m). Please see reference documents listed below.

Reference documents:

- Fixing Houses with High Radon – A Canadian Demonstration CMHC March 2008, Scott, A.G.; Fugler, D.
- Depressurization Residential Radon Mitigations at Kitigan Zibi Anishinabeg: Comparison of Above Ground Level (RIM JOIST) and Above Roof Line Discharge of Radon Mitigation SUB-SLAB Systems; Health Physics 2012 Brossard, M; Brascoupe, M; Brazeau, C; Falcomer, R; Ottawa, B; Scott, A; Whyte, J.
- Radon Mitigation in Cold Climates at Kitigan Zibi Anishinabeg, Brossard, M; Ottawa, C. B. Falcomer, R; Whyte, J.
- Health Canada's Summary Report on Active Soil Depressurization (ASD) Field Study June, 2016.
- Re-Entrainment and Dispersion of Exhausts from Indoor Radon Reduction Systems: Analysis of Tracer Gas Data, Henschel, D. B.
- Measuring At-Grade Radon Mitigation Exhaust At-Grade Radon Mitigation Exhaust, Bill Broadhead.
- Reducing Radon Levels in Existing Homes: A Canadian Guide for Professional Contractors, Health Canada
- National Standard of Canada: Radon Mitigation options for existing low-rise residential buildings.

Interpretation No.1: CARST/C-NRPP's interpretation is that ASHRAE Standard 62.1-2022 does not specify air classification or distances from radon mitigation system discharges to outdoor air intakes, but it does allow for AHJ to define the design requirements for radon mitigation systems.

Question No.1: Is this interpretation correct?

Answer No.1: Yes.

Interpretation No.2: Per the description of Classes 1 through 4 in an Informative Note (not an official part of the standard) to section 5.13.1, the classification of such air would presumably depend on the radon concentration. In Canada, the appropriate clearances for radon exhausts (at any radon concentration) and the separation distance from potential re-entrainment points has been determined by authorities having jurisdiction (for example, Health Canada's *Reducing Radon Levels in Existing homes: A Canadian Guide for Professional Contractors* and the Canadian General Standards Board (CGSB) CAN_CGSB P29-149-012-2017 and CAN_CGSB P29-149-011-2019) or current published versions. The above documents are a resource for the AHJ in making their determination and do not contradict with ASHRAE Standard 62.1-2022.

Question No.2: Is this interpretation correct?

Answer No.2: Yes.

Comments No.2: In Section 5.13.1 Classification, Standard 62.1-2022 states that "Air (return, transfer, or exhaust air) leaving each space or location shall be designated at an expected air-quality classification not less than that shown in Table 6-1, 6-2, or 6-3 or as approved by the AHJ. Therefore, since Standard 62.1 does not provide a classification for radon extraction/mitigation systems, the Standard allows the AHJ to make that determination.



Le PNCRC s'est associé à Toole Peet Navacord pour créer un forfait d'assurance exclusif destiné aux membres du PNCRC offert à un tarif préférentiel. Le programme couvre vos risques pour la responsabilité civile générale ainsi que la responsabilité civile professionnelle.

Le processus d'application est simple, s'effectue en ligne et couvre les activités de mesure du radon ou les activités de mesure et d'atténuation du radon. Le programme offre les limites suivantes :

Responsabilité professionnelle : 2 000 000\$

Responsabilité civile générale (RCG) : 2 000 000\$

Comprend également une option d'acheter une couverture RCG de 5 000 000 \$

Inscrivez-vous au programme RONA :
<https://forms.office.com/r/MegbdiLWht>

VIPPRO

SAVE MORE EVERY DAY



From preferred pricing to special deals, we're committed to giving PROS the best possible value.

INSTANT PRO DISCOUNTS



and 10% off on paint

BUY IN BULK AND SAVE



Save even more when you buy in bulk

LOW PRICES FOR PROFESSIONALS

EVERYDAY
LOW PRICE

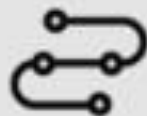
We have selected essential products for your renovation projects on which we offer low prices.

WEEKLY PRO DISCOUNTS AND DEALS



Get exclusive offers on selected products for contractors plus a privileged access to events for construction and renovation professionals

STRONG NETWORK



Canada's largest home improvement store network. Shop at any of our 236 Lowe's, Reno-Dépôt & Rona stores

PRO PROGRAM FOR BUSINESS OWNERS



We provide you with a store service desk with renovation experts who will meet your renovation needs.

PRIORITY PARKING AND EARLY-BIRD HOURS



Whether it's a loading lane, a VIP parking, access to the store from 6 a.m. and a direct entry, take advantage of our expertise for a better service.

RONA



RENO DÉPÔT



LOWE'S
CANADA

PARTENARIAT

Nous sommes ravis de dévoiler la NOUVELLE alliance entre l'ACSTR et RONA INC., qui regroupe RENO-DEPOT et LOWES, et qui deviendront bientôt RONA +. Cette collaboration vous donne accès à une vaste gamme de produits issus des marques les plus réputées du secteur de la rénovation domiciliaire.

Réalisez des économies exclusives de 5 à 15 % chez RONA INC. en créant votre compte ACSTR dès aujourd'hui !

Vous pouvez entamer le processus en remplissant le formulaire électronique sur le Web : <https://forms.office.com/r/MegbdiLWht>

En seulement deux jours ouvrables, votre compte sera actif et prêt à fonctionner. N'oubliez pas de fournir votre numéro de téléphone lors du paiement ou de balayer votre carte de l'application VIPPRO lors de vos achats en magasin pour bénéficier de vos réductions exclusives. Si vous souhaitez ouvrir un compte client, remplissez simplement le formulaire prévu à cet effet.

Pour tout le Canada, à l'exception du Québec et de l'Alberta :

https://www.rona.ca/documents/commercialcredit_ROC

Québec (français) : https://www.rona.ca/documents/creditcommerciale_Quebec_FR

Québec (anglais) : https://www.rona.ca/documents/commercialcredit_Quebec_EN

The RONA logo is displayed in white, bold, uppercase letters on a dark blue rectangular background.The RENO-DEPOT logo features the brand name in white, uppercase letters with a stylized house icon above the 'O' in 'DEPOT', set against a teal background.The LOWE'S CANADA logo consists of the word 'LOWE'S' in white, bold, uppercase letters inside a dark blue house-shaped outline, with the word 'CANADA' in smaller white, uppercase letters below it, all on a white background.

Comité des politiques



L'ACSTR poursuit son travail auprès de l'Association pulmonaire du Canada, abordant avec elle certaines opportunités en matière de politiques, puisqu'elle rencontre régulièrement des députés.



Des membres du conseil d'administration ou du personnel de l'ACSTR ont rencontré des députés provinciaux du Manitoba, de la Saskatchewan et du Nouveau-Brunswick afin de discuter de l'enjeu du radon dans leur province et de leur remettre une liste d'actions potentielles en lien avec le radon qu'il serait possible de mettre en œuvre dans la province en question.

L'ACSTR a invité tous les députés provinciaux à la rencontre de bienvenue de la Conférence de l'ACSTR 2023 à Victoria et a collaboré avec BC Lung pour assurer la tenue de discussions de suivi.



Ils ont été invités de nouveau à la rencontre de bienvenue de la Conférence

Crédit d'impôt pour la mesure du radon



- L'ACSTR et l'Association pulmonaire du Canada (APC) ont travaillé pour obtenir des éclaircissements de la part de l'Agence du revenu du Canada (ARC) quant aux dépenses liées au radon que les personnes travaillant à domicile peuvent réclamer sur leurs impôts.
- Pour en savoir plus, consultez notre site Web www.carst.ca/HomeownerHealth#CRA



BREATHE
the lung association



Révision du Code du bâtiment

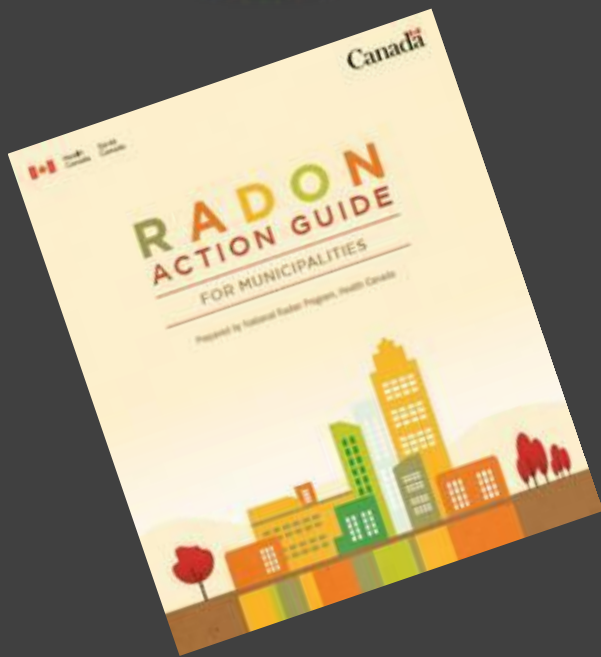
Les membres du conseil d'administration et les membres ont participé aux discussions et agi comme observateurs dans le cadre de réunions





Présences en congrès

- Congrès OBOA - Septembre 2023
- Congrès des médecins - Novembre 2023



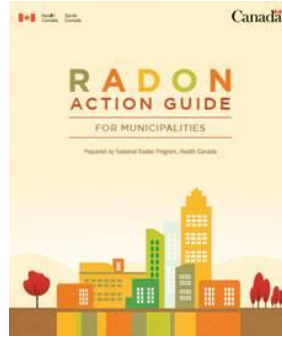
Sondage de l'ACSTR destiné aux municipalités

L'ACSTR mène actuellement un sondage dans l'ensemble des municipalités du Canada afin de :

- Mieux connaître le degré de sensibilisation de chaque communauté en matière de radon
- Connaître les différentes actions en lien avec le radon ayant été mises en place dans la communauté
- Savoir comme l'ACSTR pourrait mieux soutenir chaque municipalité en matière d'action contre le radon et de sensibilisation au radon.

Sondage de l'ACSTR destiné aux municipalités

- Réponses



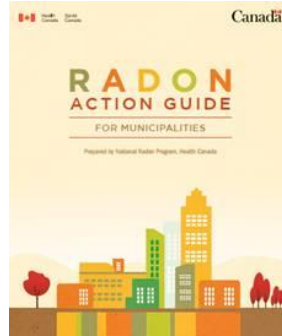
Le sondage est maintenant distribué dans les provinces suivantes :

Saskatchewan
Alberta
Nouveau-Brunswick
Manitoba
Nouvelle-Écosse
Colombie-Britannique

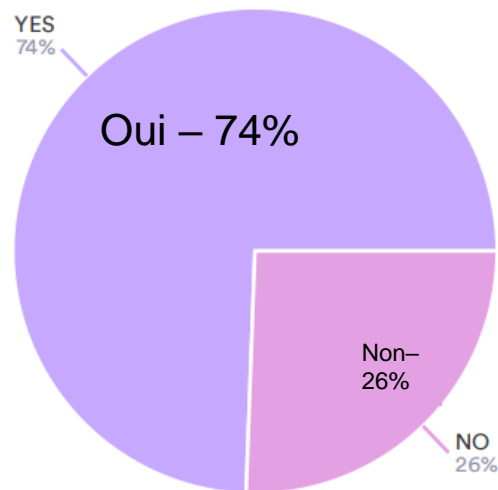
Réponses de :

APA
Conseiller
Directeur de la construction
Maire
Autre

Sondage destiné aux municipalités – Niveau de sensibilisation au radon

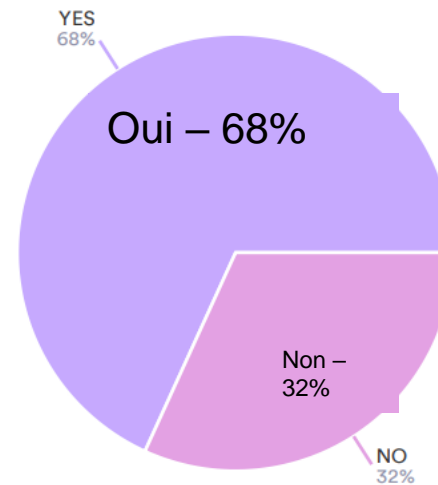


Savez-vous ce qu'est le radon ?



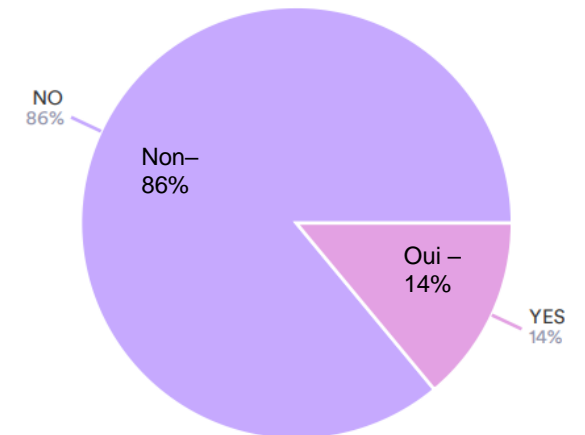
● YES ● NO

Saviez-vous que l'exposition à long terme à des concentrations élevées de radon augmente le risque de cancer du poumon ?



● YES ● NO

Avant de recevoir ce courriel, saviez-vous que Santé Canada avait élaboré un Guide d'action contre le radon destiné aux municipalités ?



● NO ● YES

Sondage de l'ACSTR destiné aux municipalités - Prochaines étapes



Avez-vous des suggestions sur la façon dont l'ACSTR pourrait aider votre municipalité à lutter contre le radon?

« Publiez des messages à grande échelle en la matière pour favoriser la sensibilisation des élus et faire en sorte que le radon soit pris plus au sérieux. »

« Donnez des informations sur les risques et les effets du radon. » « Donnez de l'information en lien avec l'atténuation. »

« Faites la promotion d'un modèle de collaboration avec d'autres intervenants. Donnez un modèle aux municipalités pour permettre à l'APA et au conseil municipal de comprendre les procédures liées au dépistage et de savoir comment agir en fonction des résultats. »

« Fournissez plus de renseignements et de trousse de dépistage aux résidents. »

« J'ai demandé à participer au Défi 100 trousse de dépistage du radon! »

« Venez nous rendre visite lors d'une assemblée publique et parlez aux résidents de notre ville. Ils seraient beaucoup plus réceptifs à l'information si elle leur était transmise par des professionnels experts en la matière qui ne font pas partie du conseil. »

« Envoyez de l'information par la poste à nos résidents. »





Actualités du PNCR-C



- Projet(s) comparatif(s) : passif et électronique
- Projet de dépistage de bâtiments à logements multiples
- Nouveaux bulletins techniques







Programme national de compétence sur le radon au Canada

- **Certification en mesure par le PNCR-C** – Cours d’une durée de 16 heures (disponible en français et en anglais ; en ligne)
- **Certification en atténuation par le PNCR-C** – Cours d’une durée de 24 heures plus exercice pratique d’installation complète d’un système d’atténuation (disponible en français et en anglais ; en ligne et en personne; la certification en mesure constitue un pré-requis)
- Programme CRNMC du PNCR-C (Contrôle du radon dans les nouvelles maisons canadiennes) pour les nouvelles constructions - Cours d’une durée de 4 à 6 heures (disponible en français et en anglais; en ligne et en personne)
- Cours de certification immobilière - Deux séances d’une heure





DEVICE SPECIFICATIONS – as stated by manufacturer							Passed C-NRPP Performance Test For more details click here.
Manufacturer	Model Name	Manufacturers stated Accuracy	Frequency of Reading	Digital Display or cell-phone app	Battery or Plug-in	Other Functions	
Airthings	 Corentium Home	±10% (after 7 days at 200 Bq/m ³), ±5% after 2 months of monitoring	12-hour, 24-hour, 7-day (first reading will take 24 hrs)	Short-term and Long-term average shown on display on the monitor.	Battery	Radon only	✓
Airthings	 Wave Plus	±10% (after 7 days at 200 Bq/m ³), ±5% after 2 months of monitoring	Hourly	No numbers are visible on monitor. Short and long-term data shown on cell phone app	Battery	Radon, CO2, humidity, temperature, VOCs, pressure	✓
Airthings	 View Plus	After 30 days at 200 Bq/m ³ , ±10% on the 7-day average and +/- 5% on the 2-month average	Hourly	Short-term average shown on display long-term average shown on app.	Battery or plug in (USB-C)	Radon only	✓
EcoSense		+/-10% at 370 Bq/m ³ after 10 hours	Measures every 10 minutes and displays an hourly rolling	Hourly level shown on display, long term average	Plug in	Radon only	✓

Au cours des dernières années, la disponibilité des moniteurs électroniques de radon a considérablement augmenté et leur popularité s'est accrue auprès des consommateurs.

Le PNCR-C a effectué plusieurs tests de performance en lien avec ces derniers.

Le RAPPORT AU CONSOMMATEUR présente les différents moniteurs ayant été évalués. Ces appareils ne peuvent pas être calibrés professionnellement et ne sont pas approuvés



Programme national canadien de la mesure de la compétence sur le radon

(PNCR-C)

<https://c-nrpp.ca/wp-content/uploads/2023/10/Digital-Device-Report-Oct-2023.pdf>



RAPPEL DE PRODUIT :

Nous vous recommandons de ne pas vendre ces appareils et informons les propriétaires qu'ils n'offrent pas une mesure précise des concentrations de radon.



<https://twitter.com/GovCanHealth/status/1567648984675622913>

Recalls and safety alerts

Consumer product advisory

Health Canada warns that Elifecity Portable Radon Meter may post a health and safety risk due to undetected high radon levels

Brand(s)

Last updated: 2022-09-07

Summary



Product: Elifecity Portable Radon Meter

Issue: Consumer products - Chemical hazard

What to do: Immediately stop using the product and dispose of it in accordance with the applicable transportation and waste requirements for electronic products.



Affected products

This alert involved the following product:

- Elifecity Portable Radon Meter

RAPPEL DE PRODUIT : - AIR STEWARD

Nous vous recommandons de ne pas vendre ces appareils et informons les propriétaires qu'ils n'offrent pas une mesure précise des concentrations de radon.

<https://recalls-rappels.canada.ca/fr/avis-rappel/moniteur-radon-portable-air-steward-rappelle-en-raison-detection-imprecise-du-radon>

Recalls and safety alerts

Consumer product recall

Air Steward Portable Radon Monitor recalled due to Inaccurate Radon Detection

Last updated: 2022-09-13

Summary



Product: Air Steward Portable Radon Monitor

Issue: Consumer products - Chemical hazard

What to do: Immediately stop using the recalled radon monitoring device.

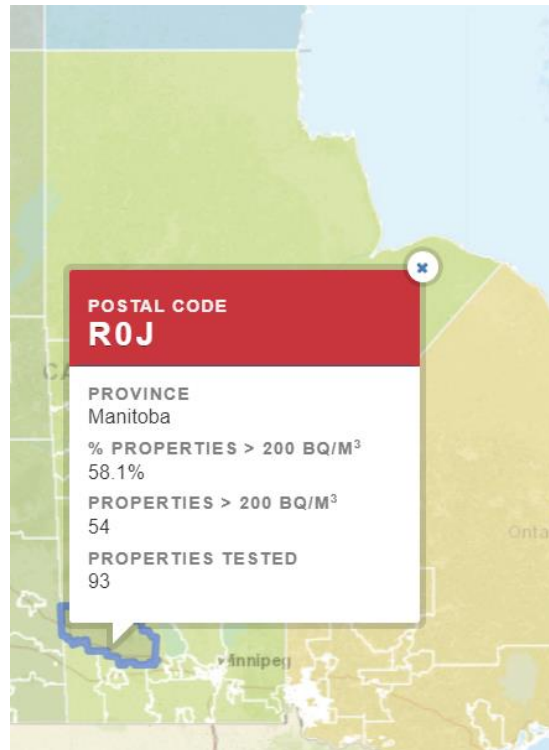


Affected products

This recall involves Air Steward Portable Radon Monitor. The monitor is a black device with the text "Radon Monitor" below the LED screen. The LED screen displays "Coefficient of injury".

CARTE DU RADON DU PNCR-C

www.c-nrpp.ca/fr/radon-map-french/



Changements depuis la dernière édition

(CGSB 149.12)

- Inclut les bâtiments existants, pas seulement les petits bâtiments résidentiels.
- Comprend des informations sur :
 - La dépressurisation active du sol – méthode privilégiée d’atténuation du radon dans les bâtiments existants.
 - La ventilation – autre méthode de réduction de la concentration de radon qui peut être utilisée lorsque la dépressurisation active du sol n’est pas possible dans un bâtiment.

Note : Le scellement des points d’entrée possibles est jugé un prérequis pour les deux méthodes susmentionnées.

- Une description étape par étape plus complète de la détermination de la puissance du ventilateur et de la conception du système a été incluse ; les sections ont été réorganisées ; les définitions ont été mises à jour.



Modifications à la CGSB – 149.11

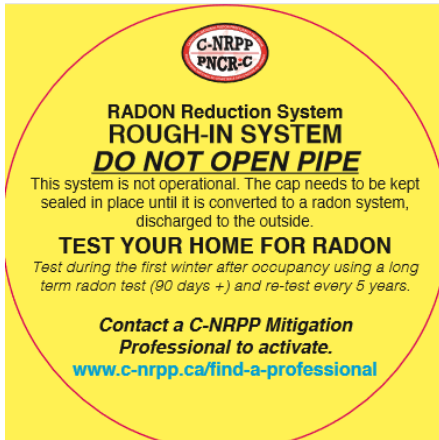
Changements depuis la dernière édition

Plusieurs modifications ont été apportées à la norme CAN/CGSB-149.11-2019, notamment :

- L'objet de la norme a été élargi aux bâtiments neufs, il ne vise plus uniquement les maisons et petits bâtiments neufs. Pour de plus amples détails, se reporter à 1.1 pour l'applicabilité de la norme aux bâtiments.
- La norme fournit maintenant des solutions techniques pour deux niveaux de mesures d'atténuation du radon pendant la construction d'un bâtiment. Ces deux niveaux se définissent comme suit :
 - Niveau 1 – Système d'atténuation du radon;
 - Niveau 2 – Système passif avec colonne de radon.
- Le niveau 1 englobe maintenant deux types, ce qui reflète la pratique dans l'industrie de prolonger parfois le tuyau de la connexion de départ du système d'atténuation du radon vers l'extérieur en passant à travers une solive de rive ou un mur latéral. Ce tuyau de connexion de départ allongé se nomme maintenant système de niveau 1b. Dans la présente norme, le système d'atténuation du radon classique est désormais désigné sous le nom de système de niveau 1a.
- Les détails du système de niveau 3 (dépressurisation active du sol) qui figuraient auparavant dans la norme CAN/CGSB-149.11-2019, ne seront dorénavant présentés que dans la norme CAN/CGSB-149.12-2024, *Mesures d'atténuation du radon dans les bâtiments existants*.
- En conséquence des modifications susmentionnées, le titre, l'introduction et l'objet de la présente norme ont été modifiés.
- La figure 1 a été ajoutée pour clarifier les composants des systèmes de niveaux 1a, 1b, 2 et 3 et leur interrelations dans la présente norme et dans la norme CAN/CGSB-149.12-2024.
- Les termes et les définitions, les références normatives et la bibliographie ont été mis à jour et augmentés.
- Des figures et des tableaux ont été ajoutés pour fournir des indications supplémentaires sur l'installation de la barrière de protection contre les gaz souterrains et les dégagements du bâtiment.
- Des sections de la norme ont été réorganisées pour mieux refléter l'ordre de construction d'un système d'atténuation du radon.



Considérations relatives à l'étiquetage



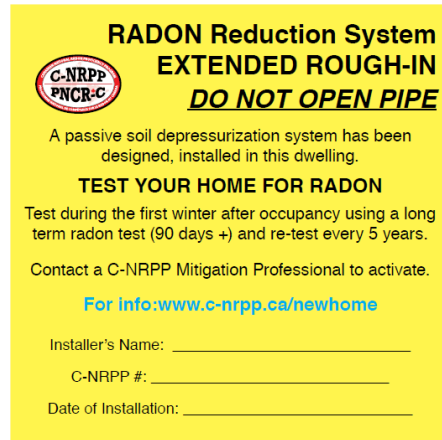
**C-NRPP
PNCR-C**

**RADON Reduction System
ROUGH-IN SYSTEM
DO NOT OPEN PIPE**

This system is not operational. The cap needs to be kept sealed in place until it is converted to a radon system, discharged to the outside.

TEST YOUR HOME FOR RADON
Test during the first winter after occupancy using a long term radon test (90 days +) and re-test every 5 years.

Contact a C-NRPP Mitigation Professional to activate.
www.c-nrpp.ca/find-a-professional



**C-NRPP
PNCR-C**

**RADON Reduction System
EXTENDED ROUGH-IN
DO NOT OPEN PIPE**

A passive soil depressurization system has been designed, installed in this dwelling.

TEST YOUR HOME FOR RADON
Test during the first winter after occupancy using a long term radon test (90 days +) and re-test every 5 years.

Contact a C-NRPP Mitigation Professional to activate.
For info: www.c-nrpp.ca/newhome

Installer's Name: _____
C-NRPP #: _____
Date of Installation: _____



**C-NRPP
PNCR-C**

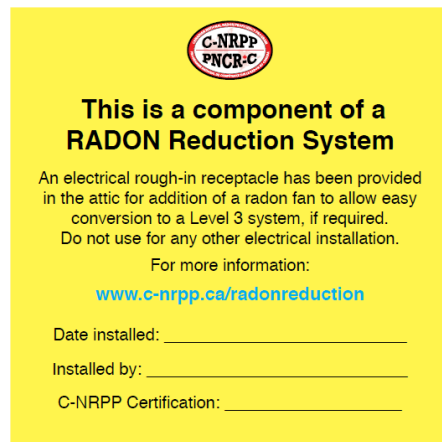
**RADON Reduction System
Active Soil Depressurization System
DO NOT TURN OFF FAN**

An active soil depressurization system has been designed, installed and is operating in this dwelling. The fan should NEVER be turned off.

The radon system pressure gauge should be read periodically. Call for service if the readings are outside the normal operating range.

For info: www.c-nrpp.ca/newhome

Installer's Name: _____
C-NRPP #: _____
Date of Installation: _____



**C-NRPP
PNCR-C**

**This is a component of a
RADON Reduction System**

An electrical rough-in receptacle has been provided in the attic for addition of a radon fan to allow easy conversion to a Level 3 system, if required. Do not use for any other electrical installation.

For more information:
www.c-nrpp.ca/radonreduction

Date installed: _____
Installed by: _____
C-NRPP Certification: _____

Tenir compte des éléments suivants :

Les étiquettes de niveau 1 comprennent des étiquettes pour :

- Les membranes d'étanchéité à l'air
- Les bassins de captation
- Les tuyaux

Les étiquettes de niveau 2 comprennent ce qui est indiqué ci-haut, mais doivent aussi inclure du texte et doivent être appliquées tous les 1,8 m (6 pi)

- Comprend une étiquette sur le circuit du panneau électrique

Les étiquettes de niveau 2 comprennent ce qui est indiqué ci-haut, et doivent aussi inclure

- Étiquette pour le ventilateur
- Étiquette de système avec pression active

Les trois niveaux doivent également inclure un ensemble pour système d'atténuation du radon pour les propriétaires de maison, pour l'entretien du radon et des fiches d'information.



How do I know that my neighbour's radon mitigation system isn't affecting the radon levels inside my house?

The most accurate way to determine levels inside a home is to test the home for radon using a long-term radon monitor. High radon levels can easily be reduced.

To reduce radon levels, a radon mitigation system can be installed. A C-NRPP Certified Radon Mitigation Professional is trained to install a system in accordance with all pertinent standards and guidelines.

A radon mitigation system consists of a pipe extending from below the basement floor slab or membrane, up through the interior where it connects to a fan, then terminates outside the home in the radon discharge pipe. This method of radon mitigation, if properly installed, creates a negative pressure below the slab and/or membrane thus drawing the soil gases out through the installed system rather than allowing them to move from the soil space beneath the building and into the home.

The radon discharge pipe can be located at the side of a house or through the roof, but there are specifications that must be met in order to prevent the radon gas from re-entering the house or entering the neighbouring houses.

If my neighbour has a radon system installed, and the discharge pipe is pointed at my house, how do I know it's not increasing the radon levels in my house?

Research shows that radon disperses quickly once discharged outdoors. Installation standards have set minimum clearance distances for radon system discharge pipes to further ensure that radon-laden air doesn't re-enter the original house or enter the neighbouring house (see reverse). If you are concerned about the radon levels within your home, you should test your own home for radon. Detectors are easily available.



⚠️ Radon is a naturally occurring radioactive gas that comes from the ground.

Radon is odourless and invisible; the only way to know your radon level is to test.

Exposure to elevated levels of radon linked to increased chances of developing lung cancer.

16% of lung cancers in Canada are linked to radon exposure. Radon is the number one cause of lung cancer in non-smokers.

Radon enters buildings through cracks with the ground.

Health Canada recommends every home be tested for radon.

Minimal clearances for all types of radon discharges

Placement of radon discharge pipes shall follow the required minimal clearances listed in Table 1.

What research is available on side-wall discharge?

Fixing Houses with High Radon - A Canadian Demonstration CMHC March 2008, Scott, A.G.; Fugler, D.

A test case in Kanata in fall 2007 provided an opportunity to test a side wall installation in Canada in a high-radon home.

Depressurization Residential Radon Mitigations at Kitigan Zibi Anishinabeg: Comparison of Above Ground Level (RIM JOIST) and Above Roof Line Discharge of Radon Mitigation SUB-SLAB Systems; Health Physics 2012 Brossard, M; Brascoupe, M; Brazeau, C; Falcooner, R; Ottawa, B; Scott, A; Whyte, J

Radon Mitigation in Cold Climates at Kitigan Zibi Anishinabeg, Brossard, M; Ottawa, C. B. Falcooner, R; Whyte, J

Table 1: Clearances

Locations	Required minimal clearances (m)
Clearance to a mechanical air supply inlet	1.8
Clearance to permanently closed window	0.3
Clearance to an operable window	1.0
Clearance from a door that may be opened	0.3
Clearance from a door that has an operable window	1.0
Clearance to outside corner	0.3
Clearance to inside corner	0.3
Clearance above paved sidewalk or paved driveway located on public property	2.1
Clearance above grade- from a veranda, a porch, a deck, or a balcony	0.3
Vertical clearance below soffits or from any attic venting component	1.0
Horizontal clearance from an area directly below the discharge where there is a risk of injury from ice falling	1.0

NOTE: The selection of the exhaust point should be made considering maximal available clearances from building openings and from outdoor occupancy areas.



Homeowner Bulletin:
Draft: March 2024

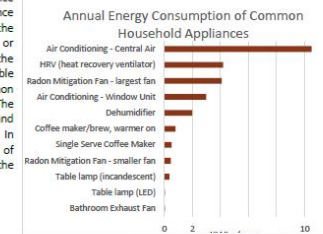
Understanding the Energy Use of a RADON MITIGATION FAN

An active mitigation system can lower radon levels in a building, but the fan must run continually. What impact will this have on energy consumption?

This bulletin puts the cost of electricity used by a radon fan into context by comparing its electrical consumption to other commonly used electric appliances.

An active radon mitigation system runs continuously to reduce the radon levels in a building to levels that are as low as reasonably achievable (ALARA). The ALARA concept is important when considering a radioactive gas. All types of radiation exposure are considered using this principle, and radon is no exception. Once a radon mitigation system is installed in a building, ensuring that it runs continuously is critical.

The cost of running an electrical appliance depends on how much electricity the appliance needs (measured in watts [W]), how often the appliance runs (several hours a day or continuously), and the cost of electricity in the region. In the chart to the right and in the table below, we've listed a variety of common household appliances for comparison. The chart provides a comparison of energy use and the table details the energy costs as well. In certain regions of the country, a variety of electricity rates are available; we've used the average rate for each region.



www.c-nrpp.ca
ph: 1-855-677-7222

info@c-nrpp.ca



Homeowner Bulletin:
March 2024

If my house has an HRV/ERV, do I still need to test for radon?

The short answer is yes: if you haven't already tested for radon, it's very important to do so regardless of whether your home has an HRV/ERV. Heat and energy recovery ventilators (HRV/ERV) are systems designed to improve indoor air quality by bringing fresh outdoor air into a home while exhausting stale indoor air. The design of these units allows for some heat (in the case of an HRV) or heat and humidity (in the case of an ERV) to be exchanged between the outgoing indoor air and incoming fresh air, in order to save energy. Depending on how they are functioning, HRV/ERVs could affect your radon levels for better, for worse, inconsistently, or not at all. That's why it's so important to test your home for radon!

HRV/ERVs must be balanced to function properly, which means that the same amount of air is being brought into the home as is being exhausted. When out of balance, a positive or negative pressure can be created in the home. Both situations can have harmful side effects. HRVs and ERVs may be out of balance if they weren't properly installed, if modifications have been made to the ducting or vents, or if the units aren't properly cleaned and maintained. Regular cleaning of the filters is an important part of maintenance that is often neglected.

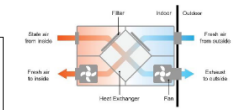
HRV/ERVs should be cleaned and balanced as per the manufacturer's instructions.

There are simple videos available online, accessible either through the manufacturer's website or YouTube.

Continual Radon Monitoring and your HRV/ERV

If you are using an HRV or ERV to manage your radon levels, we recommend that you use a digital radon monitor to continually measure your radon levels. If your HRV/ERV starts to become unbalanced, the digital monitor will alert you to increasing radon levels. The digital monitor will also alert you to season variations in your radon levels. You can find a list of consumer-grade continual radon monitors reviewed by C-NRPP as part of the Consumer Device report here: www.c-nrpp.ca

Heat Recovery Ventilator



Does your home already have an HRV/ERV?

If your home is already equipped with an HRV or ERV, consulting with a qualified professional to ensure the unit is properly set up and balanced is a good first step in addressing your radon levels. In certain cases, cleaning and adjusting the HRV or ERV has been found to lower radon levels, though this will not be as effective as installing a dedicated radon mitigation system. Even if radon levels aren't reduced, ensuring that your HRV/ERV is functioning properly is a good first step prior to taking further action to reduce your radon levels, such as consulting a C-NRPP radon professional to install a radon mitigation system. Health Canada recommends every home be tested for radon.

Other questions? Feel free to contact C-NRPP Offices:

Ph: 204-798-9649 Toll free: 1-855-722-6777
Email: info@c-nrpp.ca



<https://c-nrpp.ca/wp-content/uploads/2021/04/Homeowner-QA-Side-wall-discharge.pdf>

www.c-nrpp.ca
ph: 1-855-722-6777

info@c-nrpp.ca



Groupe de travail sur l'efficacité énergétique



Radiation Safety
Institute of Canada
Institut de radioprotection du Canada



Health
Canada

Santé
Canada



C-NRPP Technical Bulletin

Understanding RADON and the impact of ENERGY EFFICIENCY – AIR TIGHTNESS

DRAFT: March 2024

What is Radon?

Radon is a naturally occurring, radioactive gas formed from the breakdown of uranium in soil, rock, and water. Radon is invisible, odourless, and tasteless, making it undetectable without proper testing equipment. All regions of Canada have some level of radon, and it is found in all homes at varying levels.

Why is Radon Harmful?

Health Canada recommends that all homes and buildings should be tested for radon, as radon is a known carcinogen, and action should be taken to reduce radon levels in homes where the radon concentration is above the Canadian guideline level of 200 Bq/m³. Exposure to elevated levels of radon is the leading cause of lung cancer in non-smokers and is responsible for over 3000 deaths each year.

The link between Energy Retrofits and Radon

Since radon is found in indoor air, its levels can be affected by any renovation work that affects the building envelope and airflow patterns (both natural and mechanical). If the amount of fresh air leaking into a home is reduced, the radon levels inside the home are likely to increase. This doesn't mean that energy retrofits are a bad idea, it simply means that it's all the more important to consider air quality (and specifically radon) when planning energy retrofits.

Link to RESEARCH: [BC Lung's Energy Efficiency and Radon: Making the Connection](#) Focus on health in the balance of energy retrofits and indoor air quality, Dr. Anne-Marie

Informing Clients About Radon

As an Energy Advisor, you can literally save lives, simply by informing clients about radon testing and mitigation. Clients will learn it is important to test for radon after a retrofit process to make any needed radon mitigation easier. Your guidance can lead to mitigation at a time when homeowners are making important decisions about changes to their home. Reducing radon levels significantly reduces the risk of lung cancer. Taking this proactive step also reinforces their trust in your services, and ensures you are working as a conscientious professional. Link to RESEARCH: [BC Lung's Energy Efficiency and Radon: Making the Connection](#)

www.c-nrpp.ca
ph: 1-855-722-6777

info@c-nrpp.ca

TECHNICAL AUDIENCE: Energy Advisor

C-NRPP Technical Bulletin

Information for Clients

To help you provide clear information to your clients about radon, we've developed a one-page informative document that you can pass along, either in printed or electronic format. This document includes important links to references and resources. When it comes to radon, you don't need to have all the answers, but you're an invaluable conduit to spread the information to homeowners at a critical time. Link to HOMEOWNER RESOURCE: [C-NRPP's 1 pager for Homeowners](#) (in development) Link to HOMEOWNER RESOURCE: [Health Canada's Radon and Energy Retrofits](#).

Radon Basics: Testing

Radon levels vary from day to day and week to week, so it's important to conduct a long-term test of at least 90 days to get a good estimate of the average annual radon level in a home. Short-term radon testing options also exist, lasting anywhere from a few days to a couple of weeks. However, short term tests can be inaccurate, and fail to inform homeowners of their actual risk from radon.



To test for radon, homeowners may purchase a single-use kit (available online from multiple retailers in Canada – complete listing linked here), or a continuous electronic radon monitor (available online from multiple retailers - performance reviews linked here). Homeowners may also consult a certified radon measurement professional from C-NRPP (list linked here).

Radon Basics: Mitigation

No matter what the results of a radon test, the good news is that there are effective radon mitigation systems available to reduce the radon in any home! Homeowners can consult a list of certified radon mitigation professionals to find someone in their region.

Additional References:

[Energy Efficiency and Radon: Gaps in the System](#) we analyze the current energy efficiency system in Canada and find serious gaps in protection from radon. [Energy Efficiency and Radon: Solutions Moving Forward](#) we suggest concrete changes, including new guidance from Natural Resources Canada, ensuring energy advisors are trained in radon, and that radon mitigation be considered a vital part of the energy upgrade process by contractors, grant programs and lenders. [Energy Efficiency and Radon: Guide for Renovation](#) we set out step by step how renovators can meet the standard of care for protecting clients from radon.

www.c-nrpp.ca
ph: 1-855-722-6777

info@c-nrpp.ca



RADON AND ENERGY RETROFITS

- A GUIDE FOR HOMEOWNERS



WHAT IS RADON?

Radon is a naturally occurring, radioactive gas formed from the breakdown of uranium in soil, rock, and water. Radon is invisible, odourless, and tasteless, making it undetectable without proper testing equipment. All regions of Canada have some level of radon, and it is found in all homes at varying levels.

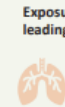


WHY IS RADON HARMFUL?

Health Canada recommends that all homes and buildings should be tested for radon, as radon is a known carcinogen.



Action should be taken to reduce radon levels in homes where the radon levels are above the Canadian guideline level of 200 Bq/m³.



Exposure to elevated levels of radon is the leading cause of lung cancer in non-smokers.

Over 3000 people a year die of radon-related lung cancer in Canada.



RADON BASICS: TESTING

Radon levels vary from day to day and week to week, so it's important to conduct a long-term test of at least 90 days to get a good estimate of the average annual radon level in a home. Short-term radon testing options also exist, lasting anywhere from a few days to a couple of weeks. However, short term tests can be inaccurate, and fail to inform homeowners of their actual risk from radon.



THE LINK BETWEEN ENERGY RETROFITS AND RADON

Since radon is found in indoor air, its levels can be affected by any renovation work that affects the building envelope and airflow patterns (both natural and mechanical). If the amount of fresh air leaking into a home is reduced, the radon levels inside are likely to increase. This doesn't mean that energy retrofits are a bad idea, it simply means that it's all the more important to consider air quality (and specifically radon) when planning energy retrofits. Talk with your renovator about good ways to plan for your future radon mitigation.



How radon enters the house - Stack Effect

RADON BASICS: MITIGATION

No matter what the results of a radon test, the good news is that there are effective radon mitigation systems available to reduce the radon in any home! Homeowners can consult a list of certified radon mitigation professionals to find someone in their region, [www.carst.ca/Mitigation-Systems](#).



Homeowner Bulletin:
Draft: March 2024

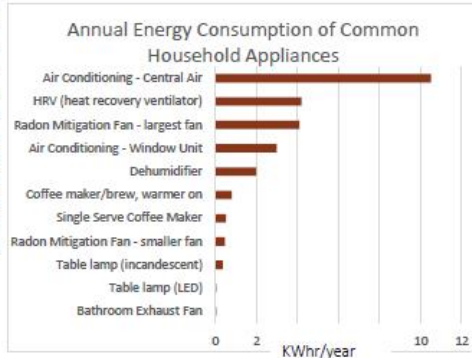
Understanding the Energy Use of a RADON MITIGATION FAN

An active mitigation system can lower radon levels in a building, but the fan must run continually. What impact will this have on energy consumption?

This bulletin puts the cost of electricity used by a radon fan into context by comparing its electrical consumption to other commonly used electric appliances.

An active radon mitigation system runs continuously to reduce the radon levels in a building to levels that are as low as reasonably achievable (ALARA). The ALARA concept is important when considering a radioactive gas. All types of radiation exposure are considered using this principal, and radon is no exception. Once a radon mitigation system is installed in a building, ensuring that it runs continuously is critical.

The cost of running an electrical appliance depends on how much electricity the appliance needs (measured in watts [W]), how often the appliance runs (several hours a day or continuously), and the cost of electricity in the region. In the chart to the right and in the table below, we've listed a variety of common household appliances for comparison. The chart provides a comparison of energy use and the table details the energy costs as well. In certain regions of the country, a variety of electricity rates are available: we've used the average rate for each region.



Homeowner Bulletin:
March 2024

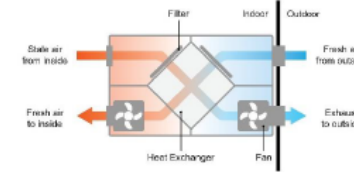
If my house has an HRV/ERV, do I still need to test for radon?

The short answer is yes: if you haven't already tested for radon, it's very important to do so regardless of whether your home has an HRV/ERV. Heat and energy recovery ventilators (HRV/ERV) are systems designed to improve indoor air quality by bringing fresh outdoor air into a home while exhausting stale indoor air. The design of these units allows for some heat (in the case of an HRV) or heat and humidity (in the case of an ERV) to be exchanged between the outgoing indoor air and incoming fresh air, in order to save energy. Depending on how they are functioning, HRV/ERVs could affect your radon levels for better, for worse, inconsistently, or not at all. That's why it's so important to test your home for radon!

HRV/ERVs must be balanced to function properly, which means that the same amount of air is being brought into the home as is being exhausted. When out of balance, a positive or negative pressure can be created in the home. Both situations can have harmful side effects. HRVs and ERVs may be out of balance if they weren't properly installed, if modifications have been made to the ducting or vents, or if the units aren't properly cleaned and maintained. Regular cleaning of the filters is an important part of maintenance that is often neglected.

HRV/ERVs should be cleaned and balanced as per the manufacturer's instructions.

There are simple videos available online, accessible either through the manufacturer's website or YouTube.



⚠ Does your home already have an HRV/ERV?

If your home is already equipped with an HRV or ERV, consulting with a qualified professional to ensure the unit is properly set up and balanced is a good first step in addressing your radon levels. In certain cases, cleaning and adjusting the HRV or ERV has been found to lower radon levels, though this will not be as effective as installing a dedicated radon mitigation system. Even if radon levels aren't reduced, ensuring that your HRV/ERV is functioning properly is a good first step prior to taking further action to reduce your radon levels, such as consulting a C-NRPP radon professional to install a radon mitigation system. Health Canada recommends every home be tested for radon.

Continual Radon Monitoring and your HRV/ERV

If you are using an HRV or ERV to manage your radon levels, we recommend that you use a digital radon monitor to continually measure your radon levels. If your HRV/ERV starts to become unbalanced, the digital monitor will alert you to increasing radon levels. The digital monitor will also alert you to season variations in your radon levels. You can find a list of consumer-grade continual radon monitors reviewed by C-NRPP as part of the Consumer Device report here: www.c-nrpp.ca



RESSOURCES

THINKING OF BUYING OR SELLING YOUR HOME?

Testing is easy and should be done in the living area of the home

Radon enters buildings where they touch the ground

Be proactive! Test for radon and set money aside to reduce your radon level and protect your family

Tests should be done for at least 91 days.

Every house can be reduced to a safe radon level: call a trained professional to help www.c-nrpp.ca/find-a-professional

Radon is killing 3200 Canadians per year from lung cancer. Radon is the leading cause of lung cancer in non-smokers.

Cost of radon compared to cost of home repairs.

Every home needs to be tested and all homes can be fixed.

Why? RADON AND REAL ESTATE

- The real estate transaction is a unique opportunity! Your clients, whether buying or selling, are focused on their home more than at any other time.
- What's our message? Radon is an important consideration when buying a home and prioritizing spending.
- Why real estate agents? Real estate agents are key! Your clients trust you and listen to your advice. You need to be informed!

As a real estate agent, you can recommend two options to your clients:

OPTION A: Test - Protect - Sell

- Test the home for radon, mitigate if required, then sell
- Proactive solution
- Ensures a healthy environment for all future owners
- Peace of mind for seller, since the radon level is known and has been addressed if required

OPTION B: Sell - Test - Protect

- The new owner tests for radon after moving in and mitigates, if required.
- People living in and investing in the home make the decision
- Healthy environment for all future owners
- Peace of mind for a buyer (knowing the test was done properly)

Remember: the decision to mitigate should be based on a long-term test.

ROLE OF THE REALTOR

- Help the home owner understand that all homes can be fixed and encourage them to resolve their radon problem
- Direct your client to a local C-NRPP professional to help test and reduce their radon levels
- Help potential buyers to understand the value of a radon mitigation system and a healthy home
- Help the purchaser understand that all homes can be fixed
- Encourage the purchaser to test the home during their first heating season in the home
- Direct your client to a local C-NRPP professional to help understand the cost of installing a system

Requests for a Radon Assessment during a Real Estate Transaction

- The Guideline provides a clear impartial process for assessing the radon levels during a real estate transaction
- Radon mitigation is still based on a long-term test

Conduct a radon assessment as part of the transaction, then test the home for radon & mitigate if required

- Ensure that a C-NRPP professional conducts the radon assessment
- Ensure that both parties understand that a long-term radon test is still required before making the decision to mitigate
- Remind the purchaser to contact a C-NRPP professional to conduct a long-term radon test in the home after moving in and reduce if necessary

Estate Agents

FOR HOMEOWNERS > 2019 CARST > BOARD OF DIRECTORS SECTION > BOARD REFERENCE MANUAL > CARST 2019 - OLD > PUBLIC RESOURCES > ...

Testing for Radon during a Real-Estate Transaction?

Here are some things to consider.

Testing is easy and it should be done in the living area of the home.

Tests should be done for at least 91 days.

Understanding a Radon Mitigation System

DO YOU HAVE HIGH RADON?

WANT TO KNOW WHAT TO DO NOW?

A radon mitigation system is a proven, efficient method to reduce radon levels.

C-NRPP PNCR-C
www.c-nrpp.ca

Are you **building a new** home?

Are you aware that the National Building Code includes measures that will make a radon mitigation system quieter, more efficient and more effective if testing your new home reveals the presence of high radon?

What's in the code?

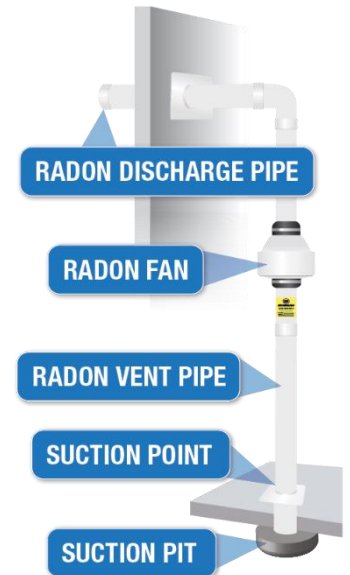
- Gravel sub-membrane layer
- Poly membrane beneath the slab
- Properly located radon rough-in or passive pipe
- Proper sealing
- Properly sealed sump pit

WARNING: These measures don't fix your radon. Once occupied, EVERY HOME NEEDS TO BE TESTED FOR RADON. If levels are high it means your radon rough-in needs to be activated with an installed fan.

For more details go to www.c-nrpp.ca

Make sure your builder knows how to properly follow these codes as a properly installed rough-in or passive system will make a future ACTIVE RADON MITIGATION SYSTEM more efficient, if required. Look for a builder who works with a certified C-NRPP Professional.

C-NRPP PNCR-C

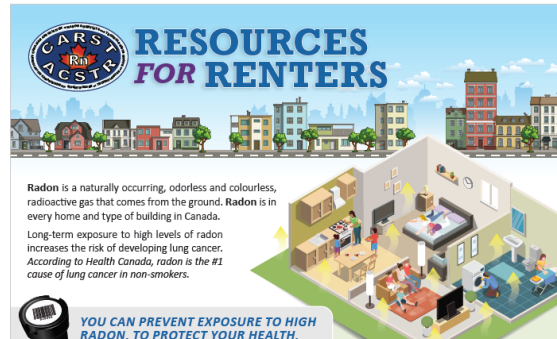


Information immobilière

<https://carst.ca/radon-for-Real-Estate-Agents>



HELPING CANADIANS REDUCE RADON RISK



Radon is a naturally occurring, odorless and colourless, radioactive gas that comes from the ground. Radon is in every home and type of building in Canada. Long-term exposure to high levels of radon increases the risk of developing lung cancer. According to Health Canada, radon is the #1 cause of lung cancer in non-smokers.



YOU CAN PREVENT EXPOSURE TO HIGH RADON. TO PROTECT YOUR HEALTH, TEST YOUR HOME FOR RADON.

TESTING FOR RADON

Testing for radon is simple and affordable: takeactiononradon.ca/test

- You can easily test your living space for radon with a DIY test kit (~\$60), or request your landlord to hire a professional to test
- Testing is recommended for 3 months (or 91 days) during the winter season or when doors and windows are typically closed
- Test kits are placed in your main living space, then mailed to a lab for analysis. The results are returned directly to you

REDUCING RADON

Mitigating radon is relatively simple:

- The health Canada 1-2 year radon mitigation program
- A temporary radon mitigation system
- A permanent radon mitigation system
- Health Canada radon mitigation program

LANDLORDS: WHAT YOU NEED TO KNOW ABOUT RADON



Radon is a naturally occurring, odorless and colourless, radioactive gas that enters buildings through regular gaps in floors, pipes, and side walls.

Long-term exposure to high levels of radon increases the risk of developing lung cancer.

Similar to having smoke-detectors, testing and reducing high radon is part of providing a safe space for tenants. Reduce your liability and test your rentals for radon.

ALL HOMES AND COMMERCIAL BUILDINGS IN CANADA HAVE SOME LEVEL OF RADON!

WHAT YOU NEED TO KNOW:

- Testing for radon is simple with DIY or professional options.
- To test large commercial buildings with HVAC systems, consult a C-NRPP certified professional.
- All buildings with high levels can be lowered with mitigation.
- Mitigation systems can be installed quickly. Work should only be completed in consult by professionals with official C-NRPP certification.

RESOURCES

CARST: Canadian Association of Radon Scientists and Technologists	Hire a registered professional to test your building and mitigate high radon. Learn about mitigation systems and types of questions to ask a professional. Participate in educational seminars.	carst.ca/Mitigation-Systems
C-NRPP: Canadian National Radon Proficiency Program	Canada's certifying program for radon. Find a local certified professional or get certified.	c-nrpp.ca
TAOR: Take Action on Radon	Public health education campaign led by Health Canada, CARST, CAREX, the Canadian Cancer Society, and supported by health authorities and groups nationwide. Find a DIY test kit, learn about radon health effects, join community testing campaigns, or enter contests including rebates for mitigation.	takeactiononradon.ca
Government of Canada - Health Canada	Access videos, factsheets, materials to share, and a list of additional resources. What you need to know	canada.ca whatyouneedtoknow.ca
CCLA: Canadian Environmental Law Association	Find reports of radon law and policy, as well as advocacy campaigns for policy changes and homeowner rebates	ccla.ca/radon
WHO: World Health Organization	Learn about the WHO recommendations for policies to prevent and mitigate residential radon exposure	who.int/ionizing_radiation/env/radon

TALKING TO YOUR LANDLORD

Ask your landlord if they have tested for radon in the past 5 years. If they are unfamiliar with radon, let them know there are community support radon testing and mitigation rebates (see takeactiononradon.ca). Most provinces and territories have tenancy legislation requiring landlords to comply with health, safety, housing and maintenance standards...

- Infographie pour les propriétaires et les locataires

- Joignez-vous à notre groupe de travail sur les habitations à logements multiples

C-NRPP Technical Bulletin

Mitigation in Multi-Unit Dwellings

November 2021

When mitigating a multi-unit dwelling, ensure you discuss the process with the building owner prior to starting installation.

This bulletin is intended to assist mitigation professionals when faced with a mitigation client whose home is part of a multi-unit dwelling.

Multi-unit dwellings include any building used as a residence by more than one family unit, such as townhouses and duplexes. Buildings with shared ownership or maintenance such as co-ops, townhouses, condominiums, stratas or vacation timeshare properties may also be considered multi-unit dwellings.

When measuring radon in multi-unit dwellings, whenever possible, best practice is to test the whole building following Health Canada's guidance on public buildings, which includes testing every ground-contact unit.

When mitigating a multi-unit dwelling, ensure you have proper insurance (including adequate liability amounts) and training for the building type. C-NRPP Radon Mitigation training only covers guidance for Part 9 buildings. We recommend you have special training for any commercial buildings.

When installing a mitigation system in a multi-unit dwelling the

1. Remember your client may not be the owner of the building to doing any work; there may be restrictions on work that can be done in the exterior or any addition to the structure. Not confirming this in advance could result in fines from the ownership group.

2. Buildings must be considered as systems. Many townhouse common foundation, and this is the typical pathway for radon.

When mitigating these units, best practice is to access all ground diagnostic testing and to ensure that the mitigation system does not have any effects on other units. You should discuss a strategy for communication and explain that the most effective strategy will also benefit

www.c-nrpp.ca
ph: 1-855-677-7222

info@c-nrpp.ca

C-NRPP certified professionals are to reflect high standards and ethics in their work, and comply with recognized standards of practice to protect public health and safety. They communicate clearly and accurately with consumers about their process and the harmful effects of radon gas.

<https://c-nrpp.ca/about/>

C-NRPP Technical Bulletin

We recognize that communication in these situations can be challenging and so we have developed a "What is radon" for multi-unit buildings and we have also developed a simple checklist that you can ask neighbouring units to complete.

3. If it is not possible to access all areas in contact with the foundation, consider mitigation options which will minimize the potential impact on other units and can be executed in compliance with any restrictions in place. Options could include sealing and increasing the ventilation rate or ensuring the fan doesn't draw air past the perimeter of the individual unit at all conditions.

4. When mitigating in multi-unit residential buildings consider:

- Before starting mitigation conduct an exterior visual inspection of the complex and consider the following features which could increase the impact of a radon mitigation system in one unit on another unit:
 - Unsealed Sump pit - If the unit you are working on has an unsealed sump pit, this may be true of other units, which could increase the possibility of drawing conditioned air from neighbouring units and a risk of back drafting.
 - Check for evidence of strip footings (see paragraphs below)
 - Mid-efficient hot water tank and furnace or any other combustion appliance, look for vents during the exterior inspection (combustion appliances present in a home will increase concerns related to back drafting)
 - Conduct a visual inspection of the condition of the accessible slab without removing any wall or floor coverings; look for excessive cracks which may provide pathways for conditioned air and risk of back drafting.

II. Determine if there is a strip footing (grade beam) between the units which would provide a barrier limiting the airflow between the units; the structure of the party-wall between the units will provide some insight into this, if the party wall is wood there may not be a footing, if the party wall is concrete it is likely there is also a strip footing under the slab; best practices would be to ask the owner for structural drawing of the building; use caution as the drawings may not include all features of the house.

III. If there is no indication of strip footings (grade beams) between the units, locate the suction point at the farthest point from other units (in interior units it will be near the centre of the slab, or in end units, it will be near the farthest wall) When calculating negative pressure achieve the bare minimum negative pressure at the points of the slab connected to other units, in order to minimize air movement in the sub-slab space under adjoining units.

IV. If you are unable to access neighbouring units, limit the amount of airflow at the connecting wall of the unit(s), during diagnostics and also verify airflow after installing and turning on the radon mitigation fan.

V. We recommend that you include a long-term radon monitor and a carbon monoxide detector for the neighbouring unit(s).

www.c-nrpp.ca
ph: 1-855-677-7222

info@c-nrpp.ca





Joignez-vous à nous le 8 mai 2024

Assemblée générale annuelle de l'ACSTR - en ligne
**16 h HAP, 17 h HAR/HNC, 18 h HAC, 19 h HAE, 20
h HAA, 20 h 30 HAT**

Tous les membres de l'ACSTR sont les bienvenus

Aussi, surveillez notre prochaine série d'assemblées publiques
régionales!



Assemblées publiques régionales de l'ACSTR tenues en 2023

Printemps – automne – hiver

Joignez-vous à nous pour l'une des assemblées publiques régionales de l'ACSTR et profitez de l'occasion pour participer à des discussions avec d'autres membres de votre région.

Prochaines dates à confirmer.