

# Installation & User Manual

## N-21 flat



## N-24 round



#### Fire Inset appliance from Nordpeis AS

Congratulations on purchasing a new fireplace insert from Nordpeis.

Your fireplace insert has been tested and documented by the National Fire Laboratory of Norway, SINTEF, to assure it's safety and environmental compliance. SINTEF test requirements are amongst the strictest in the world to contribute to a safer and healthier environment.

The purpose of this manual is to provide guidance on how to operate your new appliance safely and efficiently – we can not stress the importance of reading this manual before using your appliance enough.

It is your responsibility to ensure that the wood you intend to burn on this appliance is well seasoned (a minimum of 2 years old with a moisture content of no more than 20%) – this will enable your fireplace insert to operate efficiently.

Nordpeis have over 30 years of experience in developing and manufacturing stoves and fireplace inserts. We only introduce our products to the marketplace after several years of research and testing on our combustion techniques have taken place.

We thank you for chosing a Nordpeis product and hope it will give you many years of warmth and comfort in the future.

Best regards Nordpeis AS

pian Vane

Stian Varre Managing Director

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#### **IMPORTANT INFORMATION**

This appliance must be installed in line with current building regulations either by a registered installer or in conjunction with your local Building Inspector. If in doubt, please consult your stockist or local planning office.

If installed incorrectly, this appliance could contribute towards serious accidents and / or damage to your property and could invalidate your warranty.

The manufacturer's responsibility is limited to the supply of this appliance.

We recommend that a fireguard is used in the presence of children and old / infirm people for safety.

The installer should comply with Health & Safety regulations.

Adequate facilities should be provided for handling the appliance.

Extra care should be taken to avoid accidents and breakage of the glass panels.

Care should be taken to avoid fire cement contacting the skin. The material is caustic and in the event of skin coming into contact with the fire cement, wash off immediately with clean water.

#### 1. Before installation

Make sure the chimney is in good working order and that the required chimney draft of between 14 -25 Pascal negative is obtained. A minimum chimney height of 4meters is required. The chimney must be Class I – suitable for use with wood. Please ensure the chimney is swept prior to installing the appliance. The chimney is the key to successful installation and operation of the appliance. If the chimney is in poor condition or of the wrong design or construction the performance will be adversely effected and problems will be experienced with combustion and possible smoke emission into the room. The chimney should be one of the following types:-

- Brick built with suitable liner for use with wood / solid fuel appliances
- Twin wall stainless steel approved for use with both wood / solid fuel appliances
- Prefabricated "concrete" type systems approved for use with wood / sold fuel appliances

### DO NOT USE FLEXIBLE LINERS DESIGNED FOR USE ONLY WITH GAS APPLIANCES NEVER ALLOW THE APPLIANCE TO CARRY THE WEIGHT OF THE CHIMNEY

You must ensure that there is sufficient fresh air supply within the room as per Building Regulations. If insufficient fresh air is provided this will lower the atmospheric pressure within the room and may lead to poor combustion and smoke leakage from the appliance. We recommend that a minimum airbrick of 33cm<sup>2</sup> is installed (54cm<sup>2</sup> for installations with flue draft stabilisers).

The fireplace should stand on a fireproof hearth suitably constructed from materials which are able to support the weight of the appliance and the flue system. The hearth needs to be 300mm to the front of the appliance and 150mm to each side of the fireplace and must conform to current Building Regulations. You must ensure that the hearth can not be inadvertently be covered by carpet, rugs etc – this can be done by adding a kerb etc.

The following clearances around the fireplace must be observed to allow the correct operating procedure:-

75mm either side of the fireplace

200mm above the fireplace to non-combustible material

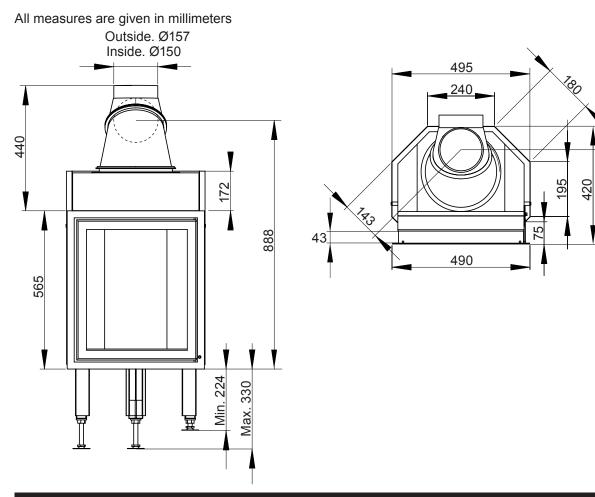
380mm above the fireplace to combustible material

We have on page 19 placed a check form you can use to prove correct installation of your new fireplace.

#### 2. Technical data N-21

Fire inset:	N-21
Material:	Steel
Door and doorframe finish:	Black paint, chrome, faint chrome, anthracite paint, silver paint, golden, faint golden
Fuel:	Fire wood, 35 cm
Effect:	2-10 kW
Draught control system:	Lighting draught control and firing draught control
Combustion system:	After burning system (pure combustion)
House heating area:	Up to 120 m <sup>2</sup>
Smoke outlets:	Top, rear and both sides
Smoke pipe.	Internal diameter Ø 150 mm
Weight:	78 kg
Air inlet below fire inset:	280 cm <sup>2</sup>
Air outlet over fire inset:	480 cm <sup>2</sup>

#### Warning: If the requirement for sufficient air inlets and air outlet is not maintained, it will cause poor air circulation and reduced heating effect. In worst case, this can cause a conflagration.



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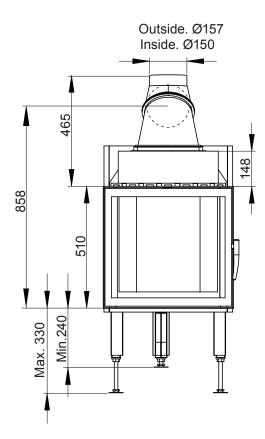
Important! It the fire insert is to be placed on a combustible floor, the floor must first be covered with a minimum 0,7 mm. thick steel plate.

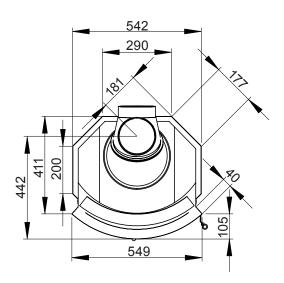
#### 3. Technical data N-24

Fire inset:	N-24
Material:	Steel
Door and doorframe finish:	Black paint, chrome, faint chrome, anthracite paint, silver paint, golden, faint golden
Fuel:	Fire wood, 40 cm
Effect:	3-12 kW
Draught control system:	Lighting draught control and firing draught control
Combustion system:	After burning system (pure combustion)
House heating area:	Up to 150 m <sup>2</sup>
Smoke outlets:	Top, rear and both sides
Smoke pipe.	Internal diameter Ø 150 mm
Weight:	93 kg
Air inlet below fire inset:	280 cm <sup>2</sup>
Air outlet over fire inset:	480 cm <sup>2</sup>

#### Warning: If the requirement for sufficient air inlets and air outlet is not maintained, it will cause poor air circulation and reduced heating effect. In worst case, this can cause a conflagration.

All measures are given in millimeters



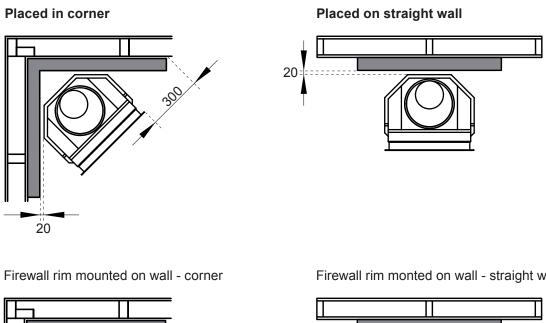


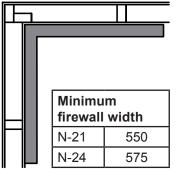
Important! It the fire insert is to be placed on a combustible floor, the floor must first be covered with a minimum 0,7 mm. thick steel plate.

#### 4. Installation site

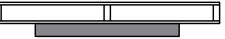
Make sure not to under exceed any safety distances. The fireplace should be sited with the appliance door no less than 1 meter away from combustial materials. When mounting steel chimney on top of the fireplace we refer to the assembly manual from the respective chimney manufacturer. Comply with the safety distances that are required when mounting a steel chimney.

The fireplace insert model and the concrete surrounding determines height on firewall. The distance between smoke pipe and flammable wall & construction must be at least 300 mm. The shortest distance between upper air outlets or top of concrete surrounding must be at least 380 mm.



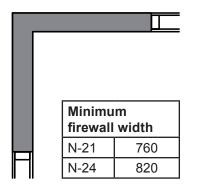


Firewall rim monted on wall - straight wall



Minimum firewall width						
N-21 700						
N-24 750						

Firewall flush mounted - corner



Firewall flush mounted - straight wall



Minimum firewall width					
N-21 1020					
N-24 1070					

All measures are approximately as misalignment in wall and floor, and distance to centre of smoke inlet into chimney can vary.

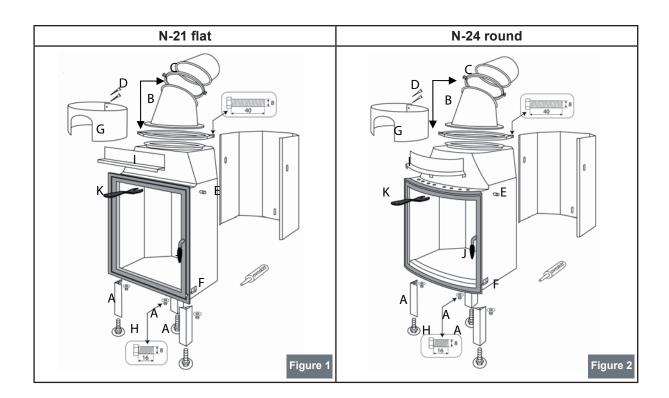
#### 5. Assembling N-21/N-24

The following tools are necessary:

- 13-mm. spanner
- Drill / screwdriver for crosshead screws
- Caulking gun
- Possibly a hammer
- 1. First you should run an inventory on all loose parts, and it should contain the following parts (look at figure 1 (N-21) and figure 2 (N-24):

Glove and lighter comes with the insert

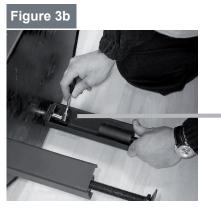
- A. 3 legs and 3 adjusting screws with set nut
- B. 3 screws with discs
- **C.** 1 smoke dome part 1
- D. 1 smoke dome part 2
- E. 1 small clamp strap with 2 adjusting screws
- F. 1 large clamp strap with 2 adjusting screws
- G. 1 heat shield for the back of inset
- H. 1 heat shield with self-drilling screws, for smoke dome
- I. 1 heat shield for the combustion air vent
- J. 1 cartridge with furnace cement
- K. 1 fire inset with door and vermiculite heat insulation plates inside
- L. 1 loose grip for air regulator handle

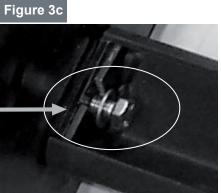


IMPORTANT! Be careful when touching the fire insert during it's first firings as the paint will be very soft until it has cured. It can take several firings to cure the paint.

- 2. Carefully place the inset on it's back and start assembling the legs this way:
- Fasten adjustment screws to the legs (you might want to give the screw a stroke with the hammer to get in place as shown in figure 3a). The nut should be fixed into the hexagonal hole.
- Fasten the legs to the body by using the accompanying screws (figure 3b). The leg must surround the supporting bracket under the inset, as shown in figure 3c. The vertical opening in the legs should point towards the centre.

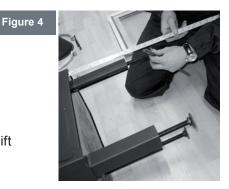






 Adjust the length of the legs to fit the concrete frame. Working range of legs:

	From:	To:		
For N-21:	224 mm	330 mm		
For N-24:	240 mm	330 mm		



- 3. Now raise the inset back into upright position (**do not tilt**, but lift the insert back into upright position)
- 4. Mounting the smoke dome

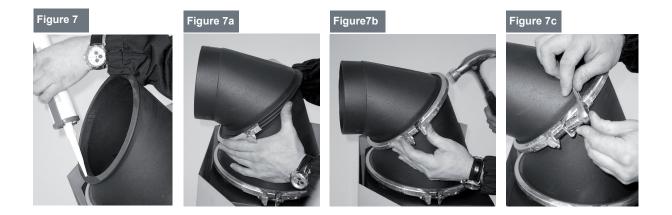
#### Mounting lower half of smoke dome:

- When placed on the inset, turn the lower half of the dome to its correct position/angle towards the chimney.
- Use the large clamp strap to fix the dome half, and tighten the adjusting screws with the spanner.



#### Mounting upper half of smoke dome:

- Put furnace cement on the part connecting to the upper dome (figure 7).
- When placed on the lower half of the dome, turn the upper half of the dome to its correct position/ angle towards the chimney (figure 7a).
- Use the smaller clamp strap to fix the dome half (figure 7b) and tighten the adjusting screws with the spanner. Figure 7c.



#### 6. Mounting heat shield for smoke dome

Fix the shield (two halves) around the smoke dome so the smoke outlet goes through the out cut in the heat shield (figure 8). Use the self-drilling screws to fix the two halves together.

7. Put the heat shield for the combustion air vent loose in place over the air inlets (figure 9).





#### 7. Installing the flue pipe

Use150 mm diameter flue pipe to connect the flue pipe into the smoke dome as per figure 10.

It is strongly recommended to first stack the concrete surroundings and fire inset, without pasting it up, to measure out the correct position of the smoke inlet before making a hole into the chimney.



IMPORTANT! Due to the expansion of the inset when heating up, the concrete surrounding must not rest on the inset. Minimum distance between inset and surroundings are 2 mm.

#### Vermiculite

The vermiculite consists of 9 different parts that are ready fixed in the inset upon delivery. If you need to replace vermiculite, please contact your dealer.

Disassembling of the vermiculite plates is done in reverse order according to figure 11a or 11b.

Assembling order for inset N-21 (figure 11a)	Assembling order for inset N-24 (figure 11b)
<ol> <li>Upper baffle plate (flange turned upwards)*</li> <li>Front moulding</li> <li>Bottom plate</li> <li>Right side plate</li> <li>Left side plate</li> <li>Left corner plate</li> <li>Right corner plate</li> <li>Back plate with logo</li> <li>Lower baffle plate with metal air duct **</li> </ol>	<ol> <li>Upper baffle plate (flange turned upwards)*</li> <li>Front moulding</li> <li>Bottom plate</li> <li>Right side plate</li> <li>Left side plate</li> <li>Left corner plate</li> <li>Right corner plate</li> <li>Back plate with logo</li> <li>Lower baffle plate with metal air duct **</li> </ol>
Figure 112	Figure 11b 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

\* When replacing the upper baffle plate, part one; the steel profile must be transferred to the new vermiculite plate before mounting.

\*\* When replacing the lower baffle plate the metal air duct must be transferred to the new vermiculite plate.

#### **Function testing**

When the inset is assembled an put in place but before pasting up the concrete surroundings one should test these functions:

Lighting draught control (lower right side)	Firing draught control (Top centre)	Door
Inner position = closed Outer position = open	Left position = closed Right position = open	Handle turned down = closed N21: Handle turned out = open N24: Handle turned left = open

#### Using the inset as an open fireplace

How to remove the door:

- 1. Remove the shipping stop clip on upper door hinge and dispose it. Open the door and carefully tighten the little hexagonal socket cap screw right above lower door hinge on the inside of the door (figure 12).
- 2. Take a grip on the door close to the body, lift the door up, and pull the lower hinge free of the body. Lower the door and it is disconnected (figure 13).



Note! This fire inset is tested and approved to be a pure combustive, energy efficient fireplace. It has a narrower and therefore more environmentally friendly smoke dome. It requires a strong draft in the chimney to be used as an open fireplace (with the door unhooked or wide open).

#### 6. Using the fireplace for the first time

With your fireplace now installed, you can light it for the first time.

Before you do so please remember:

The vermiculite panels which line the inside of your fire insert are fragile and can be broken if logs are thrown into the fire insert. The vermiculite panels are not covered by the warranty so please be careful when adding wood to your fire.

During the first few firings, the paint will cure. Ensure that the room is well ventilated during this period since the paint will give off fumes and a hazy smoke.



Lighting draft control



Upper draft control

Warning: Never fire up the inset to red hot temperatures. This might damage the metal construction. Close the upper draught control if this happens.

Use kindling or firelighters to light the fire. Open the Lighting draft control (fig 1). Keep the door ajar until the chimney is warmed. Add larger logs until the fire is established.

Once established, the lighting draft control should be closed. Use this vent only for the first 15 minutes after lighting the fire – if used for longer, the insert may become overheated. The air supply should now be adjusted by using the upper draft control (fig 2) Add additional logs when required.

The flames should be burning lively and blue flames indicate an optimal and pure combustion.

#### 7. Maintenance

Make sure the fire insert is cold before commencing any maintenance!

#### The glass door

If the glass becomes sooted, use either a stove glass cleaner and a soft cloth and wipe clean or simply dip a damp soft cloth into the wood ashes and rub this over the glass and then use a clean cloth to buff the glass. Only clean the glass when it is cold!!

Check the glass screws regularly to ensure they have not loosened. The screws should gently grip the glass –they should not be tight as this does not allow enough expansion and can then break the glass.

The door and glass gaskets should be replaced annually to ensure they serve there purpose correctly.

Ashes should be removed regularly – we recommend that a thin layer of ash is kept at the bottom of the insert to assist with burning. Please note that wood ashes can remain hot even the day after the fire has been lit so be careful when disposing of the ashes.

The vermiculite panels in your fire insert ensure a high combustion temperature which in turn provide a more energy efficient fireplace. Once the vermiculite panels have reduced to 15mm (half their original thickness) they must be replaced.

#### Important: Be careful when removing ash using an ash spade, especially for the vermiculite plates.

#### 8. Warranty

- 1. All appliances are supplied under a guarantee against material and manufacturing errors. The guarantee is limited to a maximum of the supply of a replacement component and only applies if the instructions for installation and use enclosed with the appliance have been followed, and if the product is being used under normal conditions in the dealer's assessment.
- 2. There is a five -year guarantee, with effect from the date of purchase, on cast iron fireplace inserts,
- 3. The guarantee lapses if changes have been made to the appliance without the advance knowledge and written permission of dealer/importer, and when an appliance has been shipped without sound packaging and transport protection.
- 4. The following are not covered by the guarantee:
  - Defects caused by inexpert assembly and/or treatment, such as overfiring or inncorrect fuel use.
    - Costs of transport, assembly and dismantling.
    - Glass, vermiculite panels, baffle plates and ceramick fiber gaskets.
- 5. In view of the tremendous variations in the possible options for building a chimney, we are unable to give any guarantee regarding the draught of a chimney that might lead to complaints about smoke. The chimney must be built by a professional and this establishes the guarantee for the proper functioning of this appliance.
- 6. The dealer/importer will supply a new component free of charge for every component that be comes defective during the guarantee period. The dealer must return the defective compo nent to the importer if requested by the importer, stating date of purchase, type of appliance and serial number.
- 7. Renewal or replacement of components that fall under the guarantee cannot prolong the total length of the guarantee. The guarantee provides no right whatsoever to indemnification in the event it is not possible to use the fire.
- 8. Liability can never be accepted for loss in any form whatsoever sustained by the customer, third parties or their property and caused directly or indirectly by the product.
- 9. Complaints will only be dealt with if the customer has met all his obligations, including his obligation to pay.

Insets from Nordpeis AS comes with five years warranty. The dealer who sold the inset handles a possible claim in the warranty period.

#### 9. Operating advice

#### Lighting the appliance.

During the first few firings, the paint will cure. Ensure that the room is well ventilated during this period since the paint will give off fumes and a hazy smoke.

Use kindling or firelighters to light the fire. Open the Lighting draft control (figure 1 page 13). Keep the door ajar until the chimney is warmed. Add larger logs until the fire is established. Once established, the lighting draft control should be closed. Use this vent only for the first 15 minutes after lighting the fire – if used for longer, the insert may become overheated. The air supply should now be adjusted by using the upper draft control (figure 2 page 13) Add additional logs when required.

#### **Recommended fuels**

Dry, seasoned hardwood. This should be a minimum of 2 years old and have a moisture content no higher than 20%.

#### **Prohibited fuels**

Any solid fuel – this appliance is suitable for woodburning only.

Warning: Never use treated fuels like gasoline, petrol, paraffin, alcohol or similar to start the fire. This can harm both you and the fire inset.

Paper/newspapers leave much ash behind, and cartons for milk, juice and so one are not suited for starting a fire.

Warning: Do not use impregnated wood; painted wood, plastic laminated wood, plywood, fibre plates, milk cartons or any other garbage as fuel. The warranty is not valid when such materials is used, because they can produce harmful flue gas and acid when combusted.

It is important to use pure and dry fire wood. Moist fire wood will produce a lot of soot and steam, because much of the energy released in the combustion is used to evaporate water and the temperature never gets high enough to getting a pure combustion. In worst case this can cause a chimney fire.

#### Never operate this appliance with both aircontrols wide open for long periods of time.

Once the fire is established, you should only ever have the one air control open. That way one will avoid damage to welded joints and annealing of the steel. If you burn the appliance with both air controls open for long periods, the insert will quickly overheat which may cause the heat insulation to crack, and may cause permanent damage to the insert which is not covered by the warranty.

#### Useful information about firing and fireplaces

#### Heating and air distribution

We separate between radiation heat and convection heat. Convection heat arises in the airspace between the inset and the concrete surroundings. Cold air is sucked in through the lower air inlet vents in the surrounding. This air is heated by the inset and due to the expanding of the air it raises and blows out of the upper air outlets in the concrete surrounding. This hot air circulation result in a well distributed heat in the house. Optimal location of a fireplace is close to centre of the house.

Radiation heat is the heat one can feel coming through the glass when standing in front of a fireplace.

#### Afterburner/secondary combustion

Modern fire insets are optimized to be extreme energy efficient and at the same time cause minimal air pollution. That is why they use less fire wood to produce the same amount of heating as older fire-places, and also produce less ash.

Insets from Nordpeis perform an after burning of the flue gas. The combustive process is executed in two steps: First there is a conventional fire in the fire wood. Then there is a secondary combustion when preheated extreme hot air mixes with the flue gases from the first combustion and a new pure combustion takes place.

When burning 1-kilo dry fire wood approximately 0.2 kilos disappear as steam, 0.6 kilo disappear as flue gases and 0.2 kilo is left behind as charcoal. Those 0.6-kilo of flue gases contain only half of the theoretical energy in the fire wood. The other half is bound in the charcoal.

To achieve an optimal combustion the temperature in the inset must be 600-800°C. The best way to achieve this is to put less fire wood on the fire more often! If one put too much fire wood on the fire, the amount of air is insufficient to provide a fire of high enough temperature, and the flue gases will disappear uncombusted throughout the chimney.

This is why it is important to provide the fire with more air after new fire wood is put to the fire, to ensure a flash over in the flue gases.

Use smaller split wood instead of larger. This gives a more effective and a cleaner combustive. Only pure fire wood is approved as fuel for fire insets from Nordpeis.

Burning garbage harms the environment



Use only pure fire wood



#### Hints and tips on problems with the fireplace

Problem	Cause	Repair suggestion				
Not enough	Chimney is choked	Clean out smoke pipe and inset. If this does not help,				
draught	Smoke pipe is soothed and/or there is soot accumu- lation on the baffle plate(s)	call your chimneysweeper or local dealer for further help				
	Misplaced baffle plate(s)					
Smoke ooze out of inset when in	Lack of fresh air supply to the room where the fireplace is located	Open a door or window when making the fire				
use and/or when making a fire	Under pressure in the room – electric kitchen vent or air condition evacuates too much air from the room where the fireplace is located	Turn of electric vents/air condition				
	Smoke pipes from two different fireplaces are con- nected to the same chimney at the same level	Move one smoke pipe to another level. Level difference between two smoke inlets into same chimney should be no less than 30 cm				
	Smoke pipe is elevated downwards into chimney	Smoke pipe must be relocated so there is a gradient of at least 10 degree's. Alternatively install an electric draught fan with stepless speed control in the chimney				
	Smoke pipe is mounted to far into chimney	Smoke pipe must be remounted. Must be terminated minimum 5 mm. from inner pipe in chimney				
	Soot hatch in basement is open, causing false draught into chimney	Soot hatches are to be closed at all times. A leaky or damaged soot hatch should be replaced				
	Draught controls or doors on fireplaces not in use are open, causing false draught into chimney	Close doors and draught controls on fireplaces not in use				
	Holes in chimney or open smoke inlets after removed fireplaces, causing false draught into chimney	Holes and fire inlets no longer in use should be bricked up / sealed				
	Defect and leaky brickwork causing false draught into chimney	Brick up/seal off and render all cracks and leaks				
	Too large cross-section area inside chimney gives little or no draught at all	Chimney should be renovated. Alternatively install an electric draught fan with stepless speed control in the chimney				
	Too narrow cross-section area inside chimney caus- ing to little smoke evacuation capacity	Change to a smaller inset or build a new larger chim- ney. Alternatively install an electric draught fan with stepless speed control in the chimney				
	Too short chimney causing little or no draught at all	Increase height of chimney				
Smoke ooze out of inset when windy outside	Chimney is on a level to low compared to surround- ing terrain, buildings, threes etc.	Increase height of chimney. Alternatively install an electric draught fan with stepless speed control in the chimney				
	Turbulence around chimney due to flat roof	Increase height of chimney. Alternatively install a chimney cowl				
Little heat from the fireplace	The airflow through the inset is too big due to air leaks down in the inset or too much draught from the chimney. Difficulties' with regulating the combustion and the fire wood burn away at no time	Possible leaks must be sealed. Too much draught from chimney can come under control buy mounting a damper on the smoke pipe				
Too much	Misplaced baffle plates	Check baffle plates – consult this manual				
draught	Using super dried fire wood in stead of common fire wood	Reduce the fire draught				
	Ceramic gaskets are worn down or flattened	Should be replaced with new ones				
	The chimney is too big	Call your chimneysweeper or local dealer for further help				
Glass in inset	Wet fire wood	Fire wood should contain maximum 20% moist				
becomes sooty	Firing draught control not opened enough	Open firing draught control				
Glass in inset	Poor combustion (too low temperature in the inset)	Consult this manual for correct use and correct firing.				
becomes white	The use of improper fuel (like painted wood, plastic laminated wood, plywood, fibre plates, milk cartons)	Use only dry and pure fire wood				
Smoke ooze out of inset when its	There is a decompression in the inset	Open the door carefully at first, only a centimetre or two, then wait a few seconds before opening				
door is opened	Door is opened when the fire is burning	More fire wood should be put on the fire when there is only live coal left. Door should not be opened when fir is burning				
White smoke	The combustive temperature is too low	Increase air supply to the fire				
	The fire wood is too moist	Use only dry and pure fire wood				
Black or dark	Incomplete combustion	Increase air supply to the fire				

Svein Baade Øyvin E avdsjef forsker	Trondheim, 2003-11-04.	Gyldighetstid: Inntil videre, men ikke lenger enn til 2008-11-04. Fornyelse utstedes på grunnlag av skriftlig søknad. Oppsigelse ved innehaver skal være skriftlig og med 6 mnd. varsel. NBL kan tilbakekalle en produktdokumentasjon ved misligheter eller misbruk, når skriftlig pålegg om endring ikke blir tatt til følge.	kontroll: Produktdokumentasjonens gyldighet er betinget av at det opprettes avtale om tilvirk- ningskontroll med NBL eller annet inspeksjonsorgan som NBL aksepterer. Kontrollen skal sikre produktets samsvar med vurderingsgrunnlaget.	Merking: Produktet skal merkes med SINTEF 041-134, også med produktnavn/modell, produsent, produksjonsinformasjon/sportbarhet og produktansvarlig. Merkingen skal være lett synlig.	Prøvingsresultater:         Tilfredsstiller kravene til partikkelutslipp i henhold til NS 3059 klasse II.           Tilfredsstiller norske krav til brannsikkerhet når monterings- og bruksanvisning akseptert av NBL, blir fulgt. Anvisningen med kopi av dette dokumentet skal følge ildstedet og til enhver til være tilgjengelig for montør, bruker og kontrollerende myndighet / feier.	Vurderingsgrunnlag: Rapport: 102040.64 A (sikkerthet) og 102040.64 B (miljø) av 2003-10-17 fra Norges branntekniske laboratorium as. Tegningsunderlag: Vedlegg til prøvingsrapport.	Bruksområde: Brensel: ved av lengde ≤ 40 cm. Oppstillingsavstand mot forskriftsmessig brannmur med onnamming av ubrennbare materialer: ≥ 20 mm fra utvendig skjermplate. Avstand topp onnamming til brennbart tak ≥ 300 mm. Onnamming må ventileres med åpning ≥ 500 cm <sup>2</sup> ved topp. Brennbart gulv må dekkes med metall eller ubrennbar plate under og foran ildsted. Hele gulvflaten innenfor omramming skal dekkes og eventuelt gulvbelegg fjernes.	Beskrivelse: Ildsted av stålplater med røkhette av støpejern, brennkammer isolert med Vermiculite i bunn, side og hvelv. Enkel dør med stort, buet vindu. Dørhåndtak må beijenes med varmebeskyttende "hanske". Røkuttak topp, horisontal eller vertikal røkføring, ø 160 mm.	Produkttype: Peisinnsats. Rentbrennende, lukket ildsted for omramming.	Produktnavn: Nordpeis N24.	Produsent: Spartherm Feuerungstechnik GmbH, D-49305 Melle, Tyskland.	Søker og produktansvarlig: Nordpeis as, Gjellebekkstubben 9-11, 3420 Lierskogen.	Med henvisning til Plan- og bygningsloven revidert 1997-06. 13 med Teknisk forskrift og tilhørende Veiledning av 1997-01-22 bekrefter Norges branntekniske laboratorium as, med grunnlag i prøvingsrapporter og vurderinger, at angitt produkt innøtekommer norske myndigheters krav til begrenset luftforurensning og brannteknisk sikkerhet.	FOR LUFTFORURENSNING OG BRANNTEKNISK SIKKERHET	<b>PRODUKTDOKUMENTASJON: SINTEF 041-134</b>	SINTEF Norges brannekniske laboratorium as (NBL) 7465 Trondheim
Luin 13 revelt Øyvin Brandt forsker		ed innehaver skal være uktdokumentasjon ved att til følge.	ttes avtale om tilvirk- epterer. Kontrollen skal	avn/modell, produsent, n skal være lett synlig.	<u>sse II.</u> ruksanvisning akseptert al følge ildstedet og til yndighet / feier.	2003-10-17 fra Norges	mming av ubrennbare mming til brennbart tak bunn og $\geq$ 750 cm <sup>3</sup> ved under og foran ildsted. belegg fjernes.	lert med Vermiculite i dtak må betjenes med I røkføring, ø 160 mm.					ende Veiledning av rog vurderinger, at uteknisk sikkerhet.	KERHET	041-134	ratorium as (NBL) neim

#### Sintef product documentation for N-24

10. Appendix

#### Sintef product documentation for N-21

<b>③</b> SINTEF	Norges branntekniske laboratorium as (NBL) 7465 Trondheim
PRODU	PRODUKTDOKUMENTASJON: SINTEF 041-135
FOR LUF	FOR LUFTFORURENSNING OG BRANNTEKNISK SIKKERHET
Med henvisning til 1997-01-22 bekret angitt produkt im	Med henvisning til Plan- og bygningsloven revidert 1997-06-13 med Teknisk forskrift og tilhørende Veiledning av 1997-01-22 bekrefter Norges branntekniske laboratorium as, med grunnlag i prøvingsrapporter og vurderinger, at angitt produkt innetekommer norske myndigheters krav til begrenset lutfforurensning og brannteknisk sikkerhet.
Søker og produktansvarlig:	Nordpeis as, Gjellebekkstubben 9-11, 3420 Lierskogen.
Produsent:	Spartherm, D-49305 Melle, Tyskland.
Produktnavn:	Nordpeis N21.
Produkttype:	Peisinnsats. Rentbrennende, lukket ildsted for omramming.
Beskrivelse:	Ildsted av stålplater med røkhette av støpejern, brennkammer isolert med Vermiculite i bunn, side og hvelv. Enkel dør med stort vindu. Dørhåndtak må betjenes med varmebeskyttende "hanske". Røkuttak topp, horisontal eller vertikal røkføring, ø 150 mm.
Bruksområde:	Brensel: ved av lengde ≤ 35 cm. Oppstillingsavstand met forskriftsmessig brannmur med omramming av ubrennbare materialer: ≥ 20 mm fra utvendig skjermplate. Avstand topp omramming til brennbart tak ≥ 300 mm. Omramming må ventileres med åpring ≥ 500 cm <sup>3</sup> ved bum og ≥ 750 cm <sup>3</sup> ved topp. Brennbart gulv må dekkes med metall eller ubrennbar plate under og foran ildsted. Hele gulvflaten innenfor omramming skal dekkes og eventuelt gulvbelegg fjernes.
Vurderingsgrunnlag:	Rapport: 102040.51 A (sikkerhet) og 102040.51 B (miljø) av 2003-02-19 fra Norges branntekniske laboratorium as. Tegningsunderlag: Vedlegg til prøvingsrapport.
Provingsresultater:	Tilfredsstiller kravene til partikkelutslipp i henhold til NS 3059 klasse II. Tilfredsstiller norske krav til brannsikkerhet når monterings- og bruksanvisning akseptert av NBL, blir fulgt, Anvisningen med kopi av dette dokumentet skal følge ildstødet og til enhver tid være tilgjengelig for montør, bruker og kontrollerende myndighet / feier.
Merking:	Produktet skal merkes med SINTEF 041-135, også med produktnavn/modell, produsent, produksjonsinformasjon/sporbarhet og produktansvarlig. Merkingen skal være lett synlig.
kontroll:	Produktdokumentasjonens gyldighet er betinget av at det opprettes avtale om tilvirk- ningskontroll med NBL eller annet inspeksjonsorgan som NBL aksepterer. Kontrollen skal sikre produktets samsvar med vurderingsgrunnlaget.
Gyldighetstid:	Inntil videre, men ikke lenger enn til 2008-05-06. Fornyelse utstedes på grunnlag av skriftlig søknad. Oppsigelse ved innehaver skal være skriftlig og med 6 mnd. varsel. NBL kan tilbakekalle en produktdokumentasjon ved misligheter eller misbruk, når skriftlig pålegg om endring ikke blir tatt til følge.
Trondheim, 2003-05-06.	6,
Svein Bade Svein Bade avd.sjef	Oyvin Brandt forsker



#### CHECKLIST AND CONFIRMATION ON VERIFICATION OF FIREPLACE INNSTALLATION

Residence address	Land number	Title number	Phone			
House owners name	Address	Postal code	City			
Installers name	Address	Postal code	City			
Fireplace model and manufacturer	Energy efficiency	Fuel type				
Chimney type (e.g. brick, steel, prefabricated	)	Cross-section area, cm <sup>2</sup>	Number of fire- places on same chimney			
Controllers name	name Address Pos					
Qualifications						

Checked by craftsman during installation:

Checkpoint				Yes	No
Is fireplace installed according to the manual?					
Is minimum distance to firewall checked?					
Is minimum distance to flammable materials checked?					
Is minimum distance to ceiling checked?					
Is there a non-flammable plate under and in front of fireplace?					
Will the floor withstand the weight of the fireplace?					
Do the chimneysweeper have access to soot hatch and smoke pipe?					
Do the inset have access to enough combustive air through air vents into the room?					
Is smoke inlet into chimney mounted as recommended by chimney manufacturer?					
Is the chimney suited for this fireplace?					
Do the chimney have an adequate gross-section area?					
Are there access to product documents and installation manuals on the construction site?					
Installed					
motalieu	City	Date	Craftsman's sig	inature	
	<i>C</i> .( <i>j</i>	2010	010110110100	i latar e	
CONTROL DE	CLARATION				
Installation is o	checked by the use of:				
Supplemented checklist					
Visual control					
Video camera					
Other:					
Installation is c	hecked and approved:				
Verified .					
	City	Date	Controllers signature		

It is a benefit to have documentation of correct installation in existence. Have this form filled in and contain it as security for the residence. The homeowner / landlord have an obligation to inform the local authorities on the installation of a new fireplace. You may also want to send a copy of this form to the local fire dept.

Nordpeis AS Gjellebekkstubben 9/11 3420 Lierskogen NORWAY

Telefon: 32 24 47 00 Telefax: 32 24 47 08 E-post post@nordpeis.no www.nordpeis.no