EssilorLuxottica

HEAT ILLNESS PREVENTION PROGRAM

PURPOSE AND SCOPE

The objective of this document is to regulate management methods and parties involved in relation to heat illness prevention. In particular, the purpose of this document is to:

- ensure compliance with regulations/laws;
- extend awareness of the hazards of heat illness to the North American employees;
- state roles and responsibilities of those involved in the heat prevention practices;
- provide and define guidelines that must be followed to guarantee the achievement of heat illness

EssilorLuxottica locations are generally controlled environments with air conditioning. This standard applies whenever an employee performs work activities, whether in indoor or outdoor environments, where the heat index (apparent temperature) equals or exceeds 80 degrees Fahrenheit. Examples of when this may apply include outdoor events (ex. Rolling O), outdoor kiosks locations, or if the HVAC / air conditioning fails and cannot be immediately fixed.

DEFINITIONS AND ACRONYMS / ABBREVIATIONS

- Acclimatization or acclimate: The physiological (i.e., physical, mechanical, and biochemical) change that allows the human body to adapt or get used to the effects of a new physical environment or climate. After a period of acclimatization, the same physical activity will produce fewer cardiovascular demands. The worker will sweat more efficiently, causing better evaporative cooling, and thus will more easily be able to maintain normal body temperatures.
- Administrative control: method to limit exposure to a hazard by adjustment of work procedures, or schedules.
- Cool-down-area: An indoor or outdoor area that is blocked from direct sunlight and shielded from other high radiant heat sources to the extent feasible and is either open to the air or provided with ventilation or cooling
- EHS: Environmental, Health & Safety
- Evaporative cooling: This takes place when sweat evaporates from the skin. High humidity reduces the rate of evaporation and thus reduces the effectiveness of the body's primary cooling mechanism.
- Globe temperature: The temperature inside a blackened, hollow, thin copper globe.
- Heat: A measure of energy that is transferred by a difference in temperature.
- Heat wave: Any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit (°F) and at least 10°F higher than the average daily temperature in the preceding 5 days.
- Heat illness or heat stress: A serious medical condition resulting from the body's inability to cope with a particular heat load. It includes heat cramps, heat exhaustion, heat syncope, and heat stroke.
- Heat index: measure of heat stress that considers the dry bulb temperature and the relative humidity.
- Metabolic heat: A byproduct of the body's activity.
- Personal risk factors for heat illness includes factors such as an individual's age, degree of acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use of prescription medications that may affect the body's physiological response to heat.
- Temperature: Dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer.

ROLES AND RESPONSIBILITIES

- EHS Department: Responsible for maintaining and updating the program documents, when

necessary or at least once a year.

- Supervisors / Managers: Responsible for monitoring heat and weather conditions and implementing any necessary adjustments to the work environment to prevent heat illness. They must monitor employees for signs of heat stress, provide appropriate first aid, and contact emergency services if necessary.
- Employees: Responsible for monitoring their own personal risk factors for heat-related illness and taking appropriate steps to prevent heat stress, including frequent consumption of water and other acceptable fluids and periodic rest breaks. In addition, employees may be paired with a "buddy" to monitor for signs and symptoms of heat stress.

REFERENCE REGULATIONS

Occupational Safety and Health Administration (OSHA) "Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings" standard
California Code of Regulations, Title 8, section 3396 (indoor heat)
California Code of Regulations, Title 8, section 3395 (outdoor heat)
Oregon OSHA - OARs 437-002-0156 and 437-004-1131
Maryland's heat stress standard, COMAR 09.12. 32

CONTENT

Background

Environmental risk factors for heat illness includes working conditions that increase the likelihood of heat illness, such as air temperature, relative humidity, radiant heat from the sun and other sources, conductive heat sources such as the ground, air movement, workload severity and duration, and protective clothing and equipment worn by employees.

Heat-related illnesses can happen if workplace activities in a hot environment overwhelm the body's ability to cool itself. This becomes more likely if any of the risk factors are present. Examples include working in a hot environment without adequate access to water for rehydration, working in protective gear that does not allow air circulation across the skin or working where the humidity is too high for sweat to evaporate.

Risk Factors

The following are environmental risk factors for heat illness:

- Air temperature above 90 degrees F.
- Relative humidity above 40 percent
- Radiant heat from the sun and other sources
- Conductive heat sources such as dark-colored work surfaces
- Lack of air movement
- Physical effort needed for the work
- Use of nonbreathable protective clothing and other personal protective equipment

The following are personal risk factors for heat illness:

- Lack of acclimation to warmer temperatures
- Poor general health
- Dehydration
- Alcohol consumption
- Caffeine consumption
- Previous heat-related illness
- Use of prescription medications that affect the body's water retention or other physiological responses to heat such as beta blockers, diuretics, antihistamines, tranquilizers, and

antipsychotics.

Heat-Related Illnesses

Heat illnesses are medical conditions resulting from the body's inability to cope with a particular heat load, and include heat rash, heat exhaustion, and heat stroke.

1) Heat Rash: Heat rash is the most common health problem in hot work environments. It is caused by sweating and looks like a red cluster of pimples or small blisters. Heat rash usually appears on parts of the body that overlap or rub other parts of the body, such as in the groin area, under the arms or breasts, and in knee or elbow creases.

   If an employee has symptoms of heat rash, provide a cooler, less humid work environment, if possible. Advise the employee to keep the area dry and not to use ointments and creams that make the skin warm or moist, which can make the rash worse.

2) Heat exhaustion: Heat exhaustion can best be prevented by being aware of one's physical limits in hazardous environment on hot, humid days. The most important factor is to drink enough clear fluids (especially water, not alcohol or caffeine) to replace those lost to perspiration. Signs and symptoms of heat exhaustion typically include:

   - Profuse sweating
   - Weakness and fatigue
   - Nausea and vomiting
   - Muscle cramps (associated with dehydration)
   - Headache
   - Light-headedness or fainting; fainting or loss of consciousness is potentially serious and should be treated as a medical emergency.

   When you recognize heat exhaustion symptoms in an employee, you must intervene; stop the activity and move the employee to a cooler environment. Cooling off and rehydrating with water (or electrolyte replacing sports drinks) is the cornerstone of treatment for heat exhaustion. If the employee resumes work before their core temperature returns to normal levels, symptoms may quickly return.

   If there is no intervention and the body's temperature regulation fails, heat exhaustion can rapidly progress to heat stroke, a life-threatening condition.

3) Heat stroke: Heat stroke requires an immediate emergency medical response. The person may stop sweating, become confused or lethargic, and may even have a seizure. The internal body temperature may exceed 106 degrees F.

   Signs and symptoms of heat stroke typically include:
   - Absence of sweating
   - Dry skin
   - Agitation or strange behavior
   - Dizziness, disorientation, or lethargy
   - Seizures or signs that mimic those of a heart attack

   Ensure that emergency responders are summoned immediately if heat stroke is suspected. While waiting for emergency responders to arrive, cool the employee; move the employee to an air-conditioned environment or a cool, shady area; and help the employee remove any unnecessary clothing. Do not leave the employee unattended. Heat stroke requires immediate medical attention to prevent permanent damage to the brain and other vital organs that can result in death.

See Procedure – Heat Illness Emergency Response for additional information on illness and response measures.

Prevention Options

There are both engineering and administrative controls that may be implemented to prevent heat related illnesses.
Examples of engineering controls include the following:

- Increased ventilation
- Air cooling
- Use of fans
- Shielding of the heat source (i.e. shade)
- Use of insulation

Examples of administrative controls include the following:

- Limiting or modifying the duration of exposure time (e.g., work/rest)
- Reducing the metabolic component of the total heat load
- Enhancing the heat tolerance of the workers by, for example, heat acclimatization and physical conditioning
- Training the workers in safety and health procedures for work in hot environments
- Medical screening of workers to be aware of which individuals have low heat tolerance and/or low physical fitness

Strategies to prevent heat-related illness include the following:

Hydration:

- Provide ample, cool drinking water: Make sure it's readily available and easily accessible.
- Encourage regular hydration: Remind employees to drink 1 cup of water every 20 minutes, even if they don't feel thirsty.
- Consider electrolyte drinks: For longer shifts, drinks with electrolytes can be beneficial.

Rest:

- Implement regular breaks: Even short breaks can help prevent overheating.
- Provide access to shaded or air-conditioned areas: Ensure break areas are close to the work area.
- Monitor employees closely: New or returning employees may be more susceptible to heat illness.

Shade and Cooling:

- Provide shade or air conditioning: If the kiosk is not air-conditioned, ensure adequate shade is available.
- Use fans for air circulation: Fans can help cool down the area and increase airflow.
- Consider reflective shields or insulation: These can help reduce radiant heat.

Acclimatization:

- Gradual acclimatization for new employees: Allow new employees to gradually adjust to working in the heat.
- Consider buddy system: Pair new employees with experienced coworkers for monitoring and guidance.

Training and Monitoring:

- Provide heat illness training: Train employees on recognizing signs and symptoms of heat illness and how to prevent it.
- Monitor employees for signs of heat illness: Encourage employees to check on each other and report any concerns.

- Supervisors should monitor and intervene: Supervisors should be trained to identify and address potential heat illness.

Emergency Procedures:

- Have a plan for summoning medical assistance: Establish a clear protocol for when to call for help.
- Ensure adequate first aid: Make sure employees are trained in basic first aid for heat-related illnesses.

Engineering Controls:

- Consider using reflective coverings or insulation: To reduce heat transfer into the kiosk.
- Implement fans or other cooling systems: To improve air circulation and reduce temperature.

Work Practices:

- Limit the intensity and duration of work: Adjust workload and break frequency as needed.
- Encourage employees to wear appropriate clothing: Light-colored, loose-fitting, and breathable clothing can help.
- Consider staggered work schedules: To allow for breaks and avoid working during the hottest hours.

Requirements

Supervisors are responsible for monitoring heat index. See Procedure – Heat Illness Appendix (Calculating Heat Index) for direction on how to do this.

When the heat index exceeds 80oF, employers must provide the following:

- Access to sufficient shade
- Access to 32 ounces of water per hour for each employee at all times
- Effective communication in the event of an emergency
- Training about workplace risk factors and controls, employee rights, and personal risk factors to all employees before they are exposed to a heat index of 80 degrees Fahrenheit

When the heat index exceeds 90 degrees, all of the rules for 80 degrees apply, plus:

- Effective communication with a supervisor is required through voice, observation, or electronic means; observation and monitoring of employees for signs and symptoms of heat-related illness
- Ensure that employees are observed for alertness and signs and symptoms of heat illness, and monitored to determine whether medical attention is necessary
- A cool down or rest period of at least 10 minutes is required for every two hours of work
- Develop and implement emergency medical and acclimatization plans

Retail actions: Indoor environments that are experiencing HVAC failure need to carefully monitor temperatures and consider closing if temperatures exceed 82 degrees Fahrenheit inside the store.

See **Procedures – Heat Illness "Retail-HVAC Failure Guidelines**" for more information.

Record Retention

Training

Employees and supervisors covered by this standard must receive heat stress training:

- Prior to initial heat exposure
- Annually
- Immediately following any incident at the worksite involving a suspected or confirmed heat-related illness.

Training will cover heat stress-related injuries and illnesses and prevention measures, including but not limited to:

- The work and environmental conditions that affect heat-related illness;
- The personal risk factors that affect heat-related illness;
- The concept, importance, and methods of acclimatization;
- The importance of frequent consumption of water and rest breaks in preventing heat-related illness;
- The types of heat-related illness, signs and symptoms of heat-related illness, and the appropriate first aid and emergency response measures;
- The importance of and procedures for employees immediately reporting to the employer signs and symptoms of heat-related illness;

Scope of Application
(Policy Violations)
(Language)

Attachments

1) Best Practices for Preventing Heat Illness
2) Calculating Heat Index
3) Heat Illness Emergency Response
4) Retail-HVAC Failure Guidelines

HEAT ILLNESS PREVENTION - BEST PRACTICES FOR PREVENTING HEAT ILLNESS

Elements for prevention of heat illness include: hydration, rest, shade, acclimatization, training, and monitoring for signs of heat illness.

1. Hydration:
- **Provide ample, cool drinking water:** Make sure it's readily available and easily accessible.
- **Encourage regular hydration:** Remind employees to drink 1 cup of water every 20 minutes.
- **Consider electrolyte drinks:** For longer shifts, drinks with electrolytes can be beneficial.
- **Discourage caffeine consumption**

2. Rest:
- **Implement regular breaks:** Even short breaks can help prevent overheating.
- **Provide access to shaded or air-conditioned areas:** Ensure break areas are close to the work area.
- **Monitor employees closely:** New or returning employees may be more susceptible to heat illness.

3. Shade and Cooling:
- **Provide shade or air conditioning:** If the working area (kiosk, mobile unit, etc.) is not air-conditioned, ensure adequate shade is available.
- **Use fans for air circulation:** Fans can help cool down the area and increase airflow.
- **Consider reflective shields or insulation:** These can help reduce radiant heat.

4. Acclimatization:
- **Gradual acclimatization for new employees:** Allow new employees to gradually adjust to work in the heat.
- **Consider buddy system:** Pair new employees with experienced coworkers for monitoring and guidance.

5. Training and Monitoring:
- **Provide heat illness training:** Train workers to recognize signs of heat illness and how to prevent it.
- **Monitor employees for signs of heat illness:** Encourage employees to check on each other and report concerns.
- **Supervisors should monitor and intervene:** Supervisors should be trained to identify and address potential heat illness.

6. Emergency Procedures:
- **Have a plan for summoning medical assistance:** Establish a clear protocol for when to call for help.
- **Ensure adequate first aid:** Make sure employees are trained in basic first aid for heat-related illnesses.

7. Engineering Controls:
- **Consider using reflective coverings or insulation:** To reduce heat transfer into un-conditioned spaces.
- **Implement fans or other cooling systems:** To improve air circulation and reduce temperature.

8. Work Practices:
- **Limit the intensity and duration of work:** Adjust workload and break frequency as needed.
- **Encourage employees to wear appropriate clothing:** Light-colored, loose-fitting, breathable clothing.
- **Consider staggered work schedules:** To allow for breaks and avoid working during the hottest hours.

HEAT ILLNESS PREVENTION – CALCULATING HEAT INDEX

What is the heat index and how do you calculate the heat index inside?

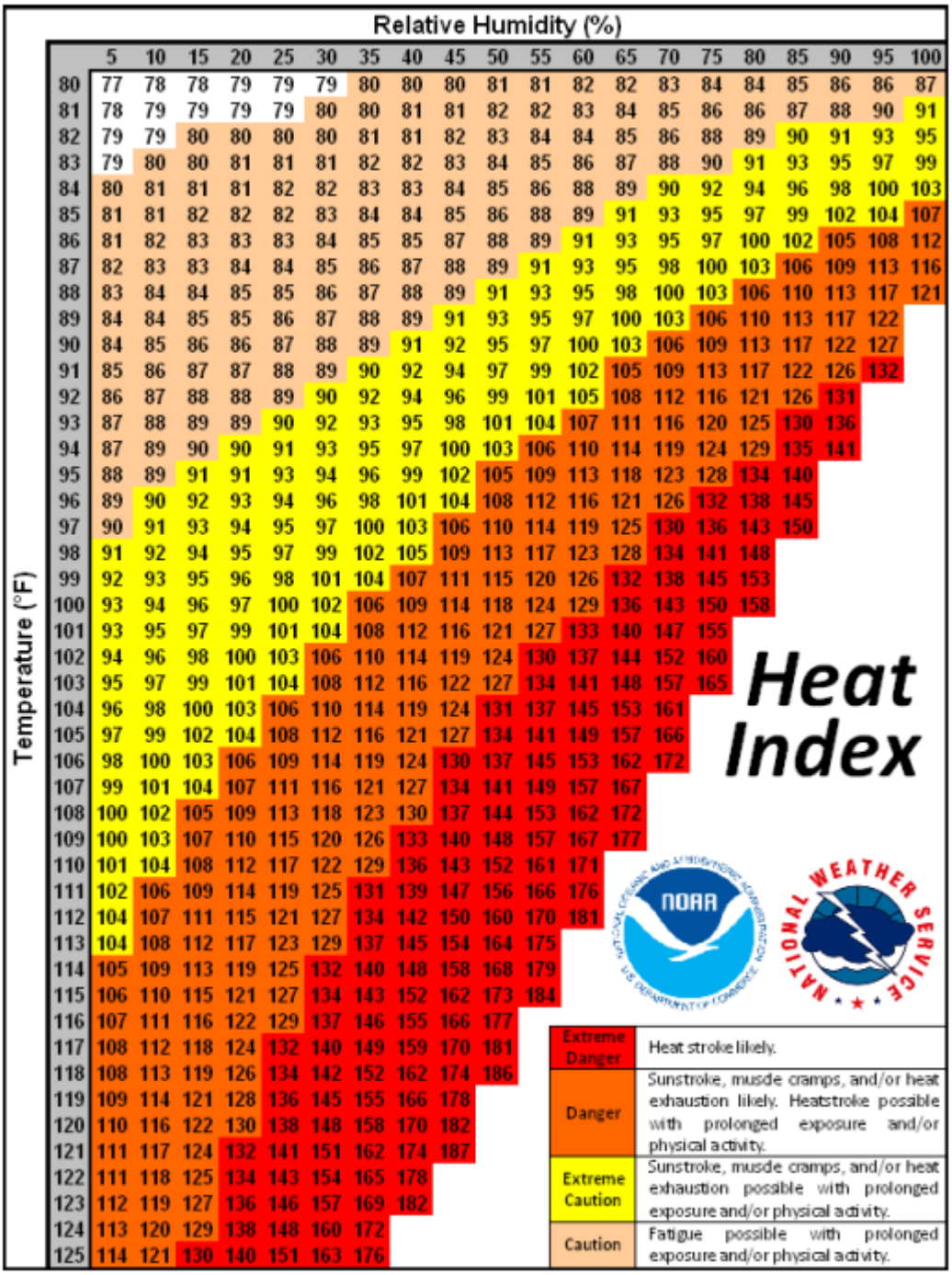
The heat index, also known as the apparent temperature, is what the temperature feels like to the human body when relative humidity is combined with the air temperature. The heat index is calculated using equations published by the National Oceanic and Atmospheric Administration's (NOAA) National Weather Service.

It can be readily determined using the OSHA-NIOSH Heat Safety Tool App (www.cdc.gov/niosh/topics/heatstress/heatapp.html) or the online calculator available from the National Weather Service (www.wpc.ncep.noaa.gov/).

One may measure the indoor temperature and relative humidity, then input into the NIOSH Heat Safety Tool App, or one may measure the indoor temperature and relative humidity, then use the NOAA Heat Index Calculator to determine the heat index temperature.

Lastly, monitors that measure the heat index both indoors and outdoors are available and relatively inexpensive.

HEAT INDEX



Temperature (°F)	Relative Humidity (%)																			
	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
80	77	78	78	79	79	79	80	80	80	81	81	82	82	83	84	84	85	86	86	87
81	78	79	79	79	79	80	80	81	81	82	82	83	84	85	86	86	87	88	90	91
82	79	79	80	80	80	80	81	81	82	83	84	84	85	86	88	89	90	91	93	95
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93	87	88	89	89	90	92	93	95	98	101	104	107	111	116	120	125	130	136		
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96	89	90	92	93	94	96	98	101	104	108	112	116	121	126	132	138	145			
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99	92	93	95	96	98	101	104	107	111	115	120	126	132	138	145	153				
100	93	94	96	97	100	102	106	109	114	118	124	129	136	143	150	158				
101	93	95	97	99	101	104	108	112	116	121	127	133	140	147	155					
102	94	96	98	100	103	106	110	114	119	124	130	137	144	152	160					
103	95	97	99	101	104	108	112	116	122	127	134	141	148	157	165					
104	96	98	100	103	106	110	114	119	124	131	137	145	153	161						
105	97	99	102	104	108	112	116	121	127	134	141	149	157	166						
106	98	100	103	106	109	114	119	124	130	137	145	153	162	172						
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110	101	104	108	112	117	122	129	136	143	152	161	171								
111	102	106	109	114	119	125	131	139	147	156	166	176								
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123	112	119	127	136	146	157	169	182												
124	113	120	129	138	148	160	172													
125	114	121	130	140	151	163	176													

Extreme Danger	Heat stroke likely.
Danger	Sunstroke, musde cramps, and/or heat exhaustion likely. Heatstroke possible with prolonged exposure and/or physical activity.
Extreme Caution	Sunstroke, musde cramps, and/or heat exhaustion possible with prolonged exposure and/or physical activity.
Caution	Fatigue possible with prolonged exposure and/or physical activity.

HEAT ILLNESS PREVENTION - EMERGENCY RESPONSE

Follow the following emergency response procedures for the type of heat stress indicated.

Heat Stroke

If a worker shows signs of possible heat stroke, professional medical treatment will be obtained immediately. The supervisor or co-workers will take the following steps to treat a worker with heat stroke:

- Call 911 and notify the supervisor.
- Move the sick worker to a cool, shaded area.
- Cool the worker using methods such as soaking his or her clothes with water, spraying, sponging, or showering him or her with water, and fanning his or her body.

The worker should be placed in a shady area and the outer clothing should be removed. The worker's skin should be wetted and air movement around the worker should be increased to improve evaporative cooling until professional methods of cooling are initiated and the seriousness of the condition can be assessed. Fluids should be replaced as soon as possible. The medical outcome of an episode of heat stroke depends on the victim's physical fitness and the timing and effectiveness of first-aid treatment. Regardless of the worker's protests, no employee suspected of being ill from heat stroke should be sent home or left unattended unless a physician has specifically approved such an order.

Heat Exhaustion

Heat exhaustion responds readily to prompt treatment. A worker suffering from heat exhaustion should:

- Rest in a cool, shaded, or air-conditioned area.
- Drink plenty of water or other cool, nonalcoholic beverages.
- Take a cool shower, bath, or sponge bath.

Workers suffering from heat exhaustion will be removed from the hot environment and given fluid replacement. They will also be encouraged to get adequate rest.

Heat Syncope (Fainting)

Workers who exhibit signs of heat syncope will be instructed by a supervisor or co-workers to:

- Sit or lie down in a cool place when they begin to feel symptoms.
- Slowly drink water, clear juice, or a sports beverage.

Heat Cramps

Workers with heat cramps should:

- Stop all activity and sit in a cool place.
- Drink clear juice or a sports beverage.
- Not return to strenuous work for a few hours after the cramps subside, because further exertion may lead to heat exhaustion or heat stroke.
- Seek medical attention if the worker has heart problems, the worker is on a low-sodium diet, or the cramps do not subside within one hour.

Heat Rash

Workers experiencing heat rash will be treated according to the following procedures:

- Directed to work in a cooler, less humid environment when possible.
- Keep the affected area dry.
- Use dusting powder to help increase comfort.

HEAT ILLNESS PREVENTION - HVAC (AC) FAILURE GUIDELINES

In the event of HVAC major component failures, landlord deficiencies, and/or delayed repairs, open a work order in Service Channel.

- Tech should enter details of the required repairs in Service Channel associated with the work order request. A timeline for repairs should be shared if possible.
- Implement controls to keep the temperature from rising. Ex. Install fans, cover sunny windows, etc.

If temperatures in the location rise to 80 degrees F:

- Store associate to call the maintenance hotline to upgrade the service to emergency status. (513) 765-3000
    - Request temporary rental units.
    - Escalate to Regional Manager or Brand Operations as needed.
- Install fans (if you have not already done so).
- Provide water.
    - If store does not have a faucet suitable for drinking water, purchase bottled water for store associates to drink. (Drinking water may be from a bathroom sink, bottled water dispenser, kitchen / employee lounge sink, etc. It may not be from a slop sink or janitor sink.)
- If the indoor temperature cannot be reduced to below 80 degrees F, consider closing early. Check with your Regional Manager first.

Temporary Unit Information:

- Maintenance's vendor will deliver the temp rental equipment within 4 – 6 hours whenever possible. If same day delivery is not possible, the vendor will schedule to deliver the next day at open.
- The temp rental company will install the required amount of equipment to keep the store at or near the Luxottica standard set points. (Cooling 72* / Heating 68*)
  Note the following:
    - Temporary units can only lower the temperature by 10 degrees and multiple may be needed to address the size of the space.
    - During set up of the equipment the Sub will instruct the store associates on how to maintain the units while in our space. (Turning on/off, adjusting temperature, emptying condensate)
    - All rental agreements default to a 28-day rental period and will automatically renew until called off by the customer. Note: Active temp rental contracts are reviewed on a bi-weekly basis for each store to ensure units are still needed.
- Once repairs are completed and HVAC is back to 100% operation, the store is to enter a note in work order in Service Channel where they requested temp units and request the units be removed.