GUIDELINE *ESSENTIALS*

KEY TAKEAWAYS

Design & Maintenance

TAKEAWAY	EXPLANATION
When planning new construction or renovation projects, an interdisciplinary team should review evidence-based practices and perform initial risk assessments to facilitate developing a safe project plan.	• NEW Reviewing the most up-to-date evidence can facilitate planning for a construction or renovation project that also aligns with regulatory requirements. **2.3** • Reviewing layout and workflows in the current perioperative suite or a simulated room can optimize team communication and patient safety and minimize workflow disruptions. **2.4** • NEW Perioperative RNs on the interdisciplinary team contribute to the development of documents that are related to the design project, specifically regarding clinical input. **2.7** • NEW Creating and maintaining a safety risk assessment that includes infection prevention, patient handling and movement, patient fall prevention, medication safety, behavioral and mental health risks, patient mobility, security, vulnerabilities, and factors that support safe design facilitates communication with responsible stakeholders. **2.9, 2.12, 4.3** • NEW Conducting an infection control risk assessment as part of the safety risk assessment identifies issues that require mitigation and implantation of risk mitigation strategies during construction and commissioning of the project. **2.9.1, 3.14, 4.4, 5.1**
The interdisciplinary team should develop and implement the functional program that will be used throughout the project.	• The functional program is the foundation for the construction project and is intended to inform stakeholders (eg, construction project personnel, health care organization personnel) throughout the project by communicating details of the functional and operational requirements of any new, major, or minor renovation project. **2.8** • After the functional use of the space is determined, the type of patient care areas and their design, number, and location is easier to decide based on multiple factors (eg, owner, designers, construction restraints, patient population, procedure types). **2.8**
The health care facility should design the heating, ventilation, and air conditioning (HVAC) system and parameters to meet requirements.	• Designing the HVAC system and parameters to meet the requirements associated with the intended use of the space promotes a safe environment by keeping the parameters (ie, minimum total air changes/hour, minimum outdoor air changes/hour, minimum filter efficiency, temperature, relative humidity, pressure relationship to adjacent areas) in the designated range and reducing the level of environmental contaminants. **3.8** • NEW Collaborating with facility personnel responsible for HVAC system operations and maintenance to schedule monitoring of HVAC system efficacy promotes a healthier environment for patients and staff. **3.9** • NEW Limiting obstructions in the pathway of the HVAC system promotes the necessary airflow in the room. **3.9.1**

AORN

TAKEAWAY

Perioperative personnel, maintenance personnel, and other stakeholders should collaborate to maintain the perioperative suite and its components, including making provisions for utility and HVAC disruptions.

EXPLANATION

- Maintaining all infrastructure, equipment, and updates, such as technology, HVAC, and surfaces promotes a safe environment. **13.1**
- During the design process, understanding the needs of the personnel, equipment, and infrastructure in the new construction or renovation and future renovations can support efficacious use and upkeep of the surgical suite. **13.1**
- NEW When the HVAC systems are shut down (ie, for maintenance, repair, testing emergency backup capacity, new construction) coordination to relocate immunocompromised patients, providing backup or portable units, and allowing sufficient time after reoperation for air exchanges to clean the air can provide a safe environment after a general power failure. **13.3**
- Performing a risk/cost/benefit analysis helps determine whether a ventilation setback strategy can be incorporated into the HVAC system during periods when the OR is unoccupied. **13.6**
- NEW Using portable HEPA filters during construction, renovation, and repairs and during temporary disruption of the main HVAC system can optimize air supply-systems in high-risk areas (ie, ORs). **13.8**

AORN